



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

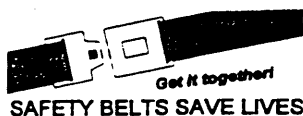
Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***



AUTO SAFETY HOTLINE
(800) 424-9393
Wash. D.C. Area 366-0123

DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Contract DTNH22-94-D-27058
Case DSI-95-ODI-3

1995

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crash-worthiness performance of the involved vehicle(s) or their safety systems.

1 Identification

1.1 Number: 3

1.2 Name

1.3 VIN: 2P4FH41

1.4 Year/Make/Model: 1985/Plymouth Voyager

1.5 Date of Accident 1/92

1.6 Location

2 Summary of Collision Events

2.1 Description

Vehicle 1, a 1985 Plymouth Voyager driven by a 44-year-old male, was travelling eastbound on a two-lane, undivided roadway approaching a four-way intersection. There were a total of seven occupants in Vehicle 1 as shown in Figure 1.

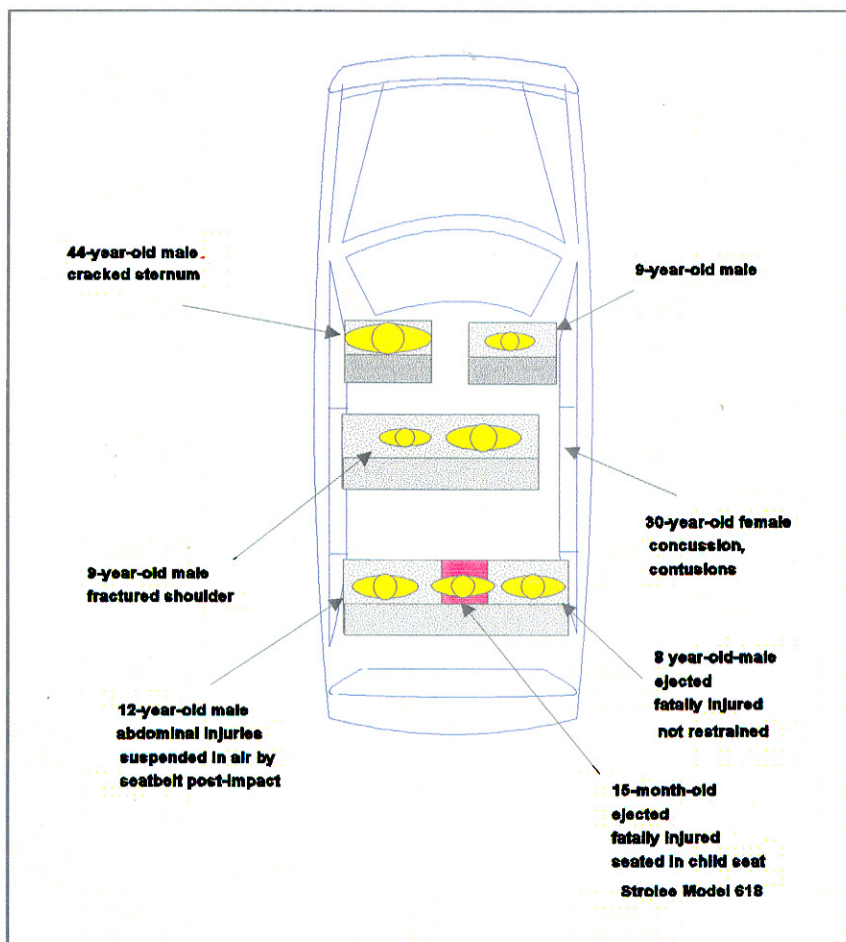


Figure 1. Occupant Seating Positions - Vehicle 1

Vehicle 2, a 1977 Buick Century driven by a 17-year-old male was travelling southbound on a two-lane divided roadway approaching the same intersection. This intersection is controlled by YIELD signs in the northbound and southbound direction. As Vehicle 1 entered the intersection the driver of Vehicle 2 began braking. Vehicle 2 struck the left rear of Vehicle 1. Vehicle 1 was pushed into a counterclockwise rotation, crossed the entire intersection, tripped on the curb at the northeast leg of the intersection, and rolled one-quarter turn onto its right side. During rotation two occupants in the rearmost seat were ejected. During the overturn, the right side of Vehicle 1 struck a metal sign post. Vehicle 2 was pushed into a counterclockwise rotation--rotating approximately 90 degrees before overriding the curbed median south of the intersection. Vehicle 2 continued rotating and came to rest on the median facing approximately 270 degrees from its original path of travel.

2.2 Accident Diagram

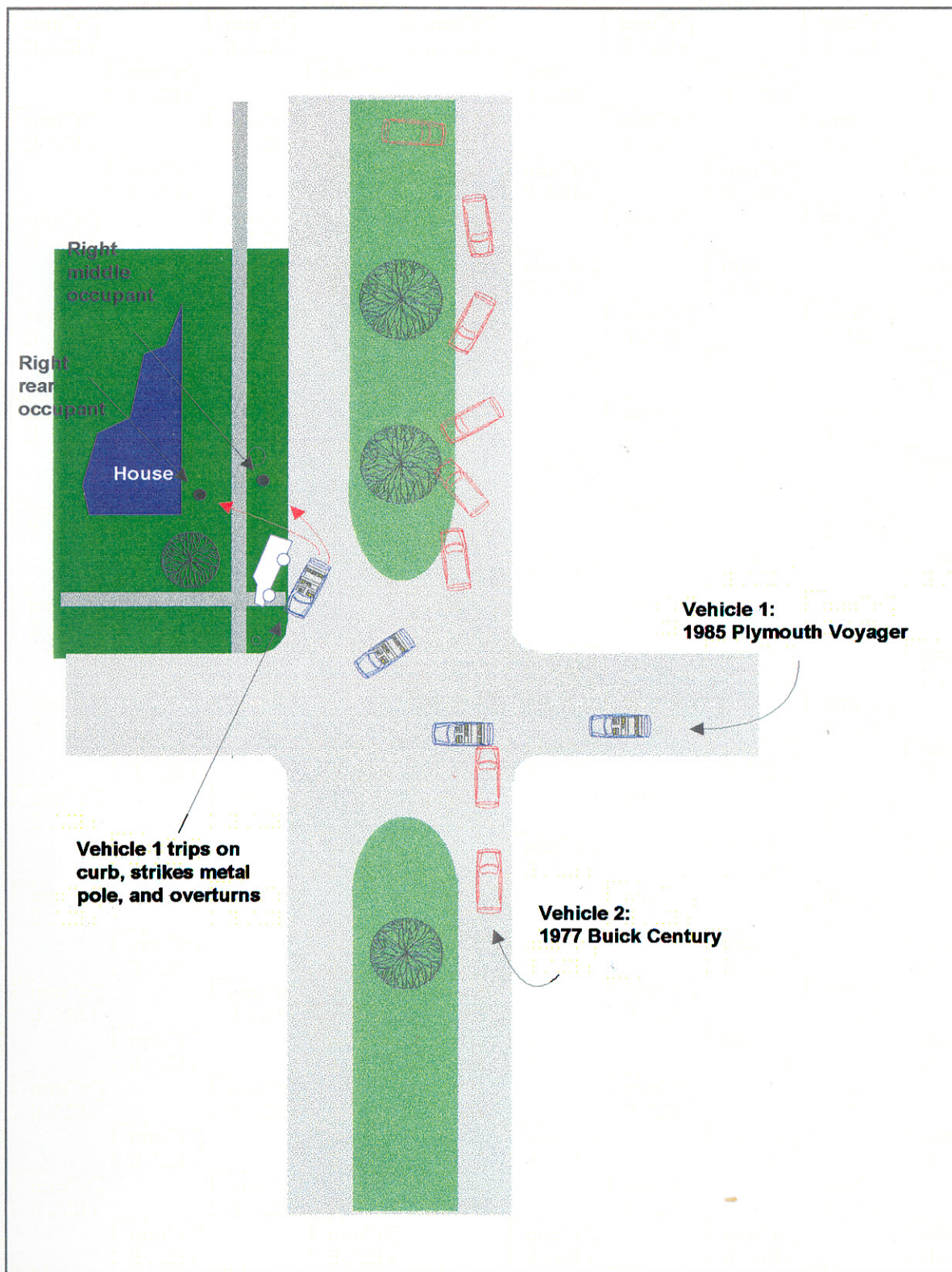


Figure 2. Accident Diagram

2.3 Collision Configuration

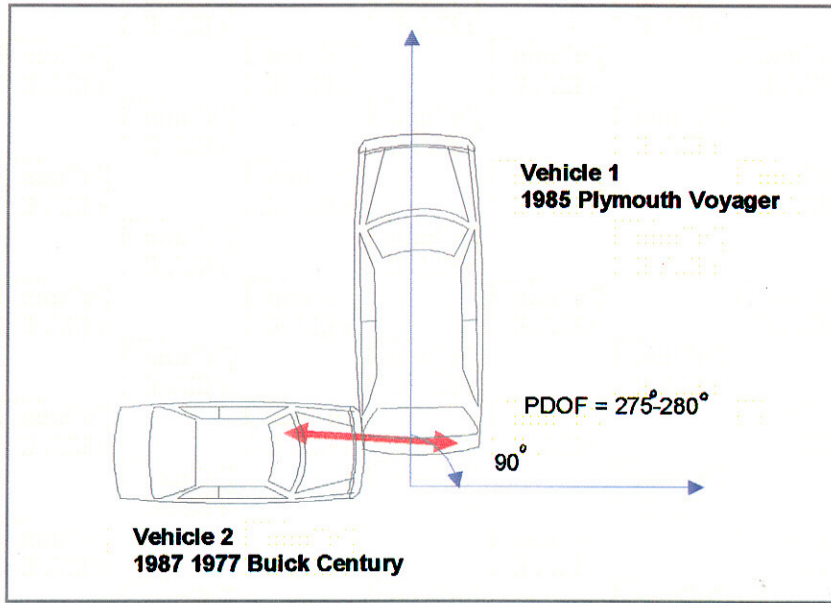


Figure 3. Collision Configuration

2.4 Impact speeds

According to the police, Vehicle 2 was travelling 66 MPH when it impacted the left rear section of Vehicle 1. The police also believe that Vehicle 2 was travelling at 74 MPH at the beginning of the 77 feet of skid marks prior to impact. Vehicle 1's speed prior to impact was calculated to be 34 MPH.

Impact speeds were calculated by DSI using the conservation of linear momentum as shown in the following pages. The speed calculated for Vehicle 1, the Plymouth van, was 32.2 MPH; the speed for Vehicle 2 was calculated to be 73.7 MPH.

The parameters:

S_a	Speed of auto at impact.
S_v	Speed of van at impact.
s_a	Speed of auto after impact.
s_v	Speed of van after impact.
W_a	Weight of auto = 4331
W_v	Weight of van = 3527
d_a	Post impact travel distance of auto = 198 feet
d_v	Post impact travel distance of van = 65 feet
f_a	Post impact drag factor for auto = 0.65
f_v	Post impact drag factor for van = 0.65
a_a	Travel angle at impact for auto
a_v	Travel angle at impact for van
b_a	Travel angle for auto after impact
b_v	Travel angle for van after impact

	Direction	Angle	Sine angle	Cos angle
a_a	South	0	0	1
a_v	East	90	1	0
b_a	SE	5	.087	.996
b_v	SE	44	.69	.72

Post-impact speed of auto:

$$S_a = \sqrt{30 * d_a * f_a} = \sqrt{30 * 198 * .65} = 62.13$$

Post-impact speed of van:

$$S_v = \sqrt{30 * d_v * f_v} = \sqrt{30 * 65 * .65} = 35.6$$

The conservation of momentum formula along east-west axis:

$$S_v * W_v * \sin a_v + S_e * W_e * \sin a_e = s_v * W_v * \sin b_v + s_e * W_e * \sin b_e$$

Substituting /solving :

$$S_v * 3527 = 62.13 * 4331 * .087 + 35.6 * 3527 * .72$$

$$S_v = 113814 / 3527 = 32.2 \text{ MPH}$$

The conservation of momentum formula along north-south axis:

$$S_v * W_v * \cos a_v + S_e * W_e * \cos a_e = s_v * W_v * \cos b_v + s_e * W_e * \cos b_e$$

Substituting /solving :

$$S_e * 4331 = 62.13 * 4331 * .72 + 35.6 * 3527 * 1$$

$$S_e = 319302 / 4331 = 73.7 \text{ MPH}$$

NOTE: Both vehicles travelled across multiple surfaces post crash. The net effect to the results of the conservation of momentum calculations cannot be precisely quantified.

2.5 Vehicle damage

	Vehicle 1	Vehicle 2
CDC	09LBEW3	12FYEW3
PDOF	280	010

The left side of Vehicle 1 sustained moderate damage extending from the left rear bumper to an area just forward the left rear tire. The glass in the last rear seat position disintegrated. The liftgate opened as a result of the collision and the base portion of the liftgate was pushed to the right. This vehicle rolled over onto its right side and there was contact damage along the entire side. There was also a linear crease in the right side passenger door due to the impact with the metal sign post. The glass in both right-hand seating positions had disintegrated--likely due to the rollover.

The front of Vehicle 2 sustained major front end damage extending from the left front bumper corner to approximately 2/3 of the width of the front end. It appears that the left front tire was restricted.

2.6 A damage-only EDCRASH run was performed using Collision Deformation Classifications generated from photographs.

The results of the run are shown in the following table:

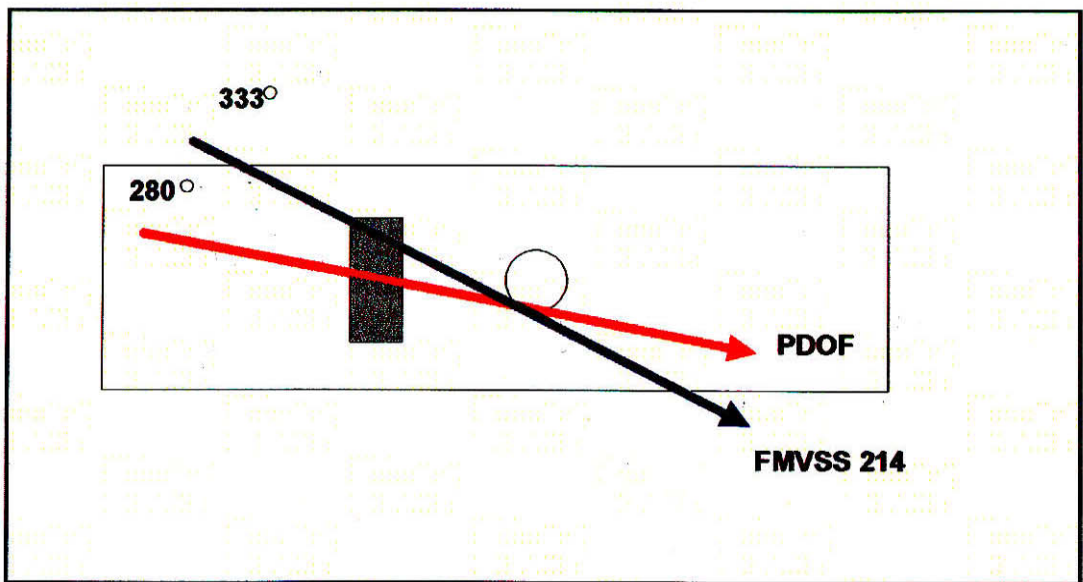
	Total	Longitudinal	Lateral
Vehicle 1	10.8 MPH	-1.9 MPH	10.6 MPH
Vehicle 2	8.8 MPH	-8.7 MPH	-1.5 MPH

2.7 Ejection paths

Two occupants were ejected during the course of this collision. The first occupant, a 15-month-old female, was seated in a child seat in the middle position of the rearmost bench seat. According to investigators, the lap belt was being used with the seat but was being used improperly. The second occupant, an 8-year-old male, was seated in the right position of the rearmost bench seat--next to the 15-month-old. According to investigators, the belt in this position was not used during the collision. At impact, both occupants would have moved to their left. Given that the rightmost occupant was unbelted, he would have moved a greater distance and may have overridden or contacted the middle occupant. In either case, he would have been out of position. As Vehicle 1 began to rotate sharply in a counterclockwise direction, both occupants were ejected from the rear of the vehicle through the now-open liftgate. The middle occupant was still in the child seat at the time of ejection. She came to rest south of the final rest of Vehicle 1 on the grass strip bordering the northbound lanes. The right-hand occupant came to rest near a house on the southeast corner of the intersection approximately 25-30 feet southeast of Vehicle 1 at final rest. The sequence of ejection is not know, but it would appear that right-hand, out-of-position occupant was ejected first and with a greater velocity than that of the middle occupant. This is based on the final rest positions of the two occupants.

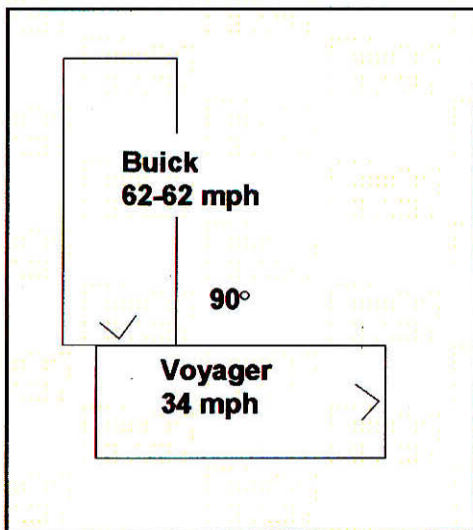
3 Illustrations

The following diagram describes the forces which acted upon the latching mechanism on the liftgate during this collision as compared to forces which act on the liftgate during FMVSS testing.



4 Findings

4.1 Original findings



- Voyager was impacted at left quarter panel at speeds and angle as shown on above illustration
- Voyager rolled onto its right side at the end of the collision event.
- Liftgate opened as the result of direct impact on the liftgate and distortion of body structure and latch system components caused by the impact loading.

4.2 DSI Findings

- It appears likely that both unrestrained right-hand rear seat occupant and middle rear seat occupant were ejected from the rear of the vehicle.
- The liftgate likely opened as a result of direct accident contact, combined

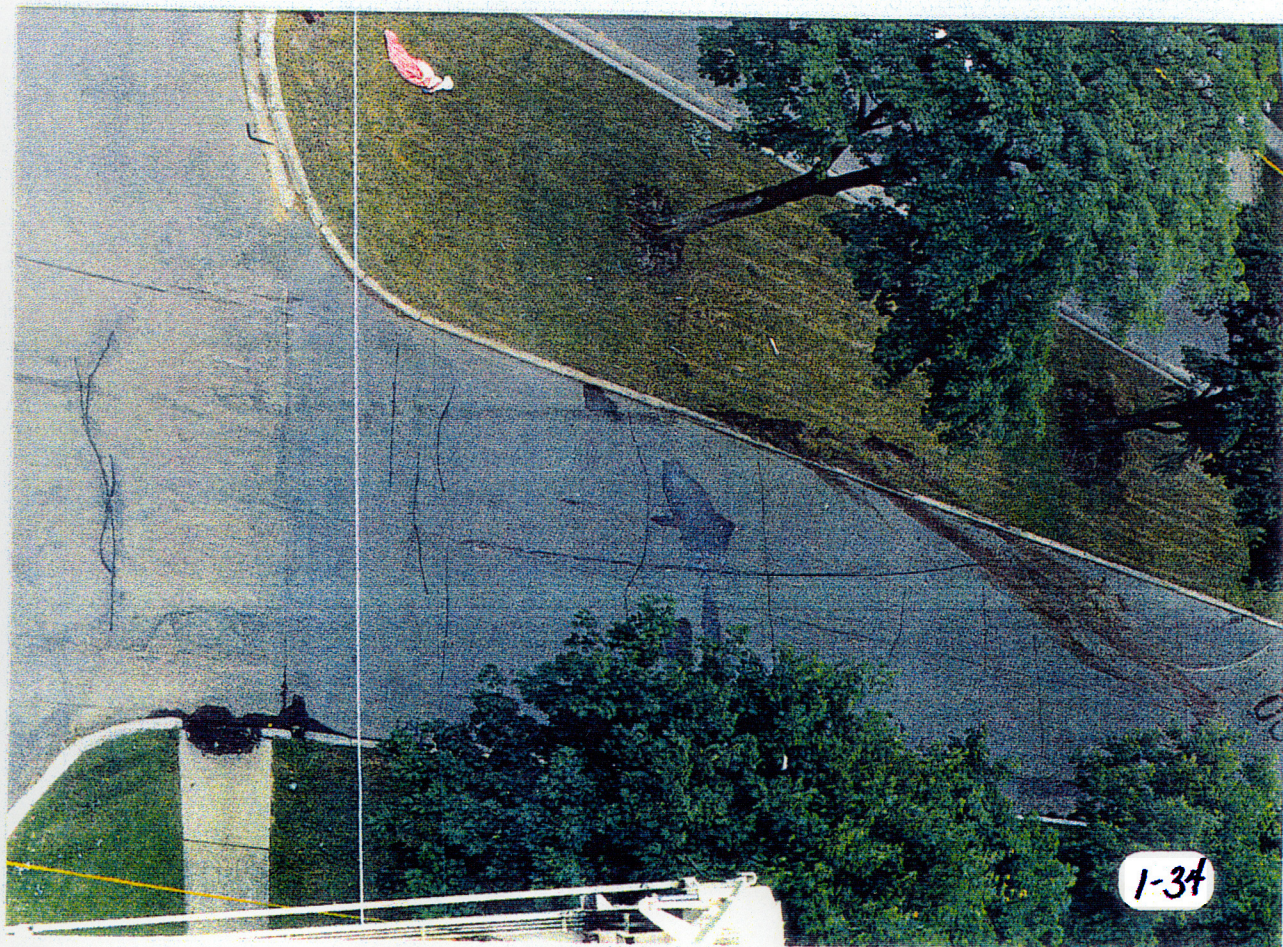
with structure distortion and rotational loading.

- The right-hand occupant was probably out of position at the time of ejection.
- The right-hand occupant was apparently not restrained.
- The child safety seat was apparently not properly restrained.

5 Notes

In the original police report there was mention of a scale diagram. None was to be found within the body of the report. The investigating PD was contacted and a scaled diagram was obtained. This is a large diagram (48 in. x 48 in.) and is included in this report.

6 Appendices

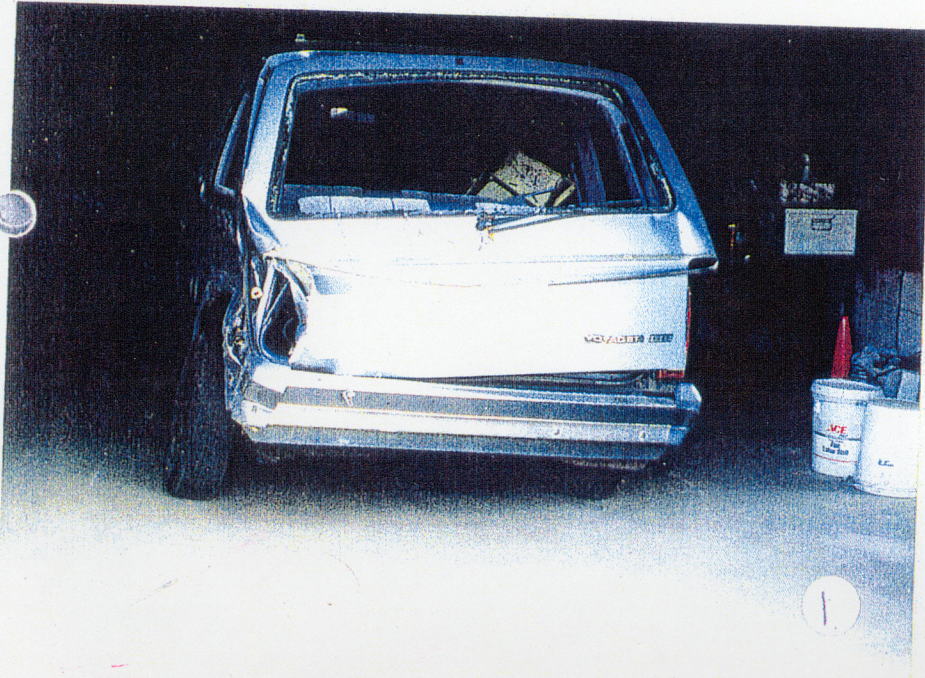
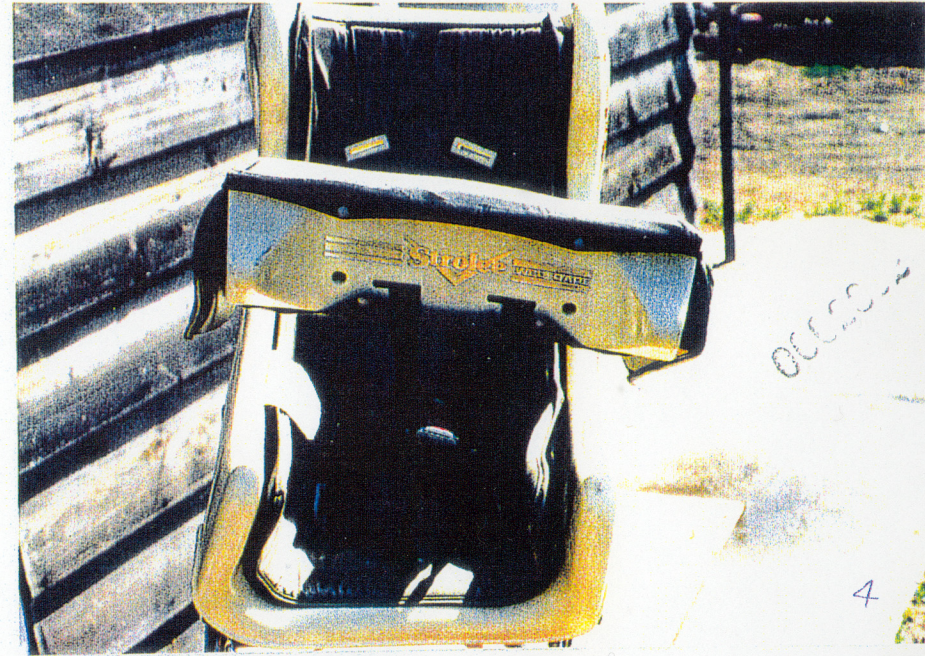
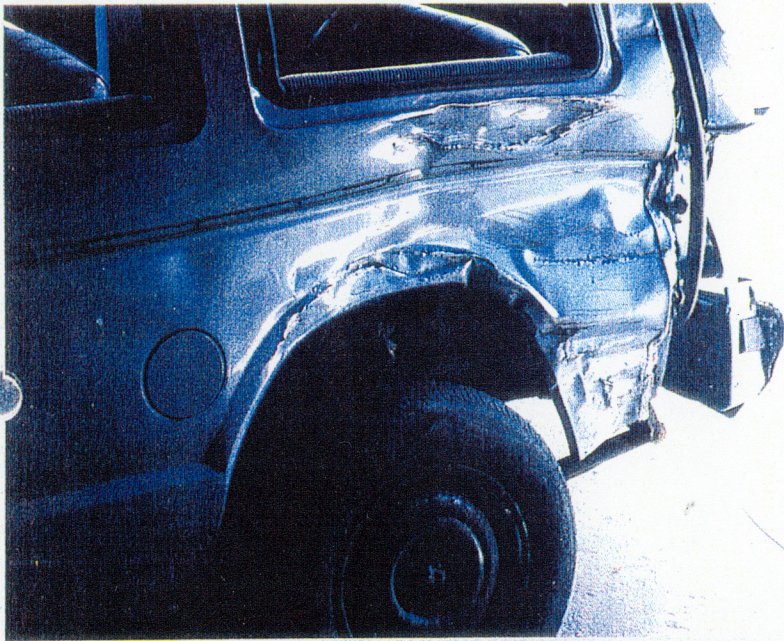




0002741



0002744





0002743

SET NO. 1



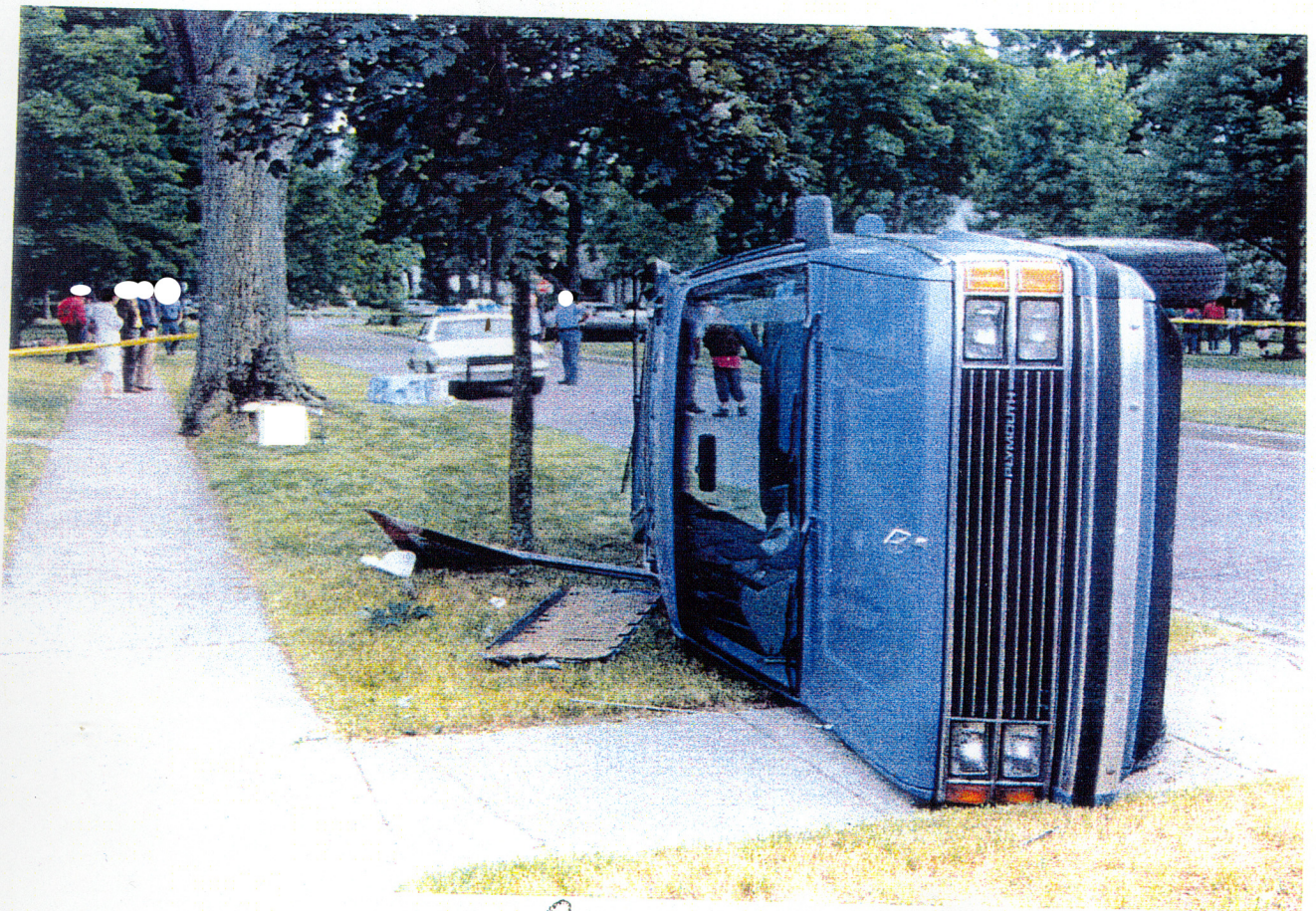
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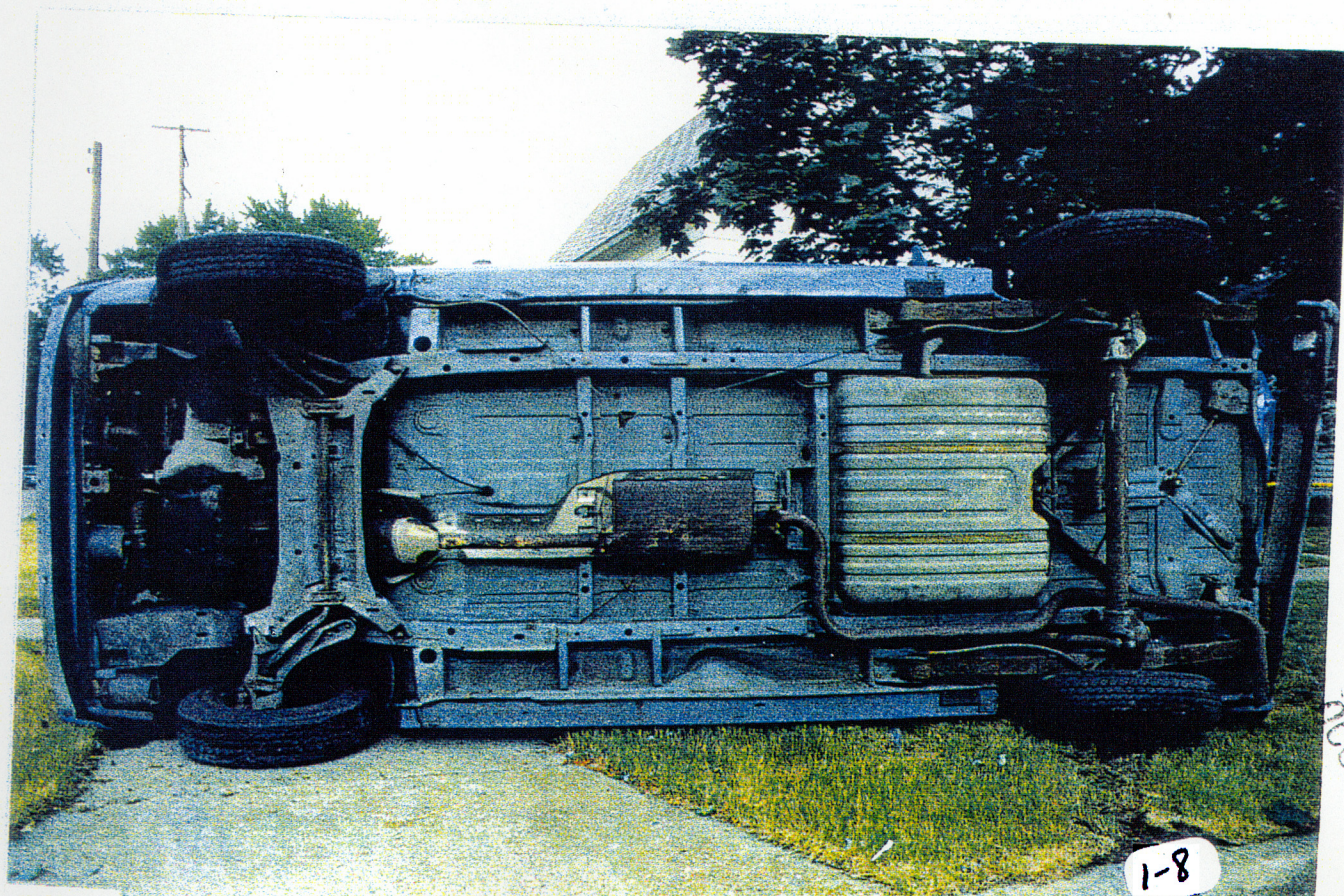
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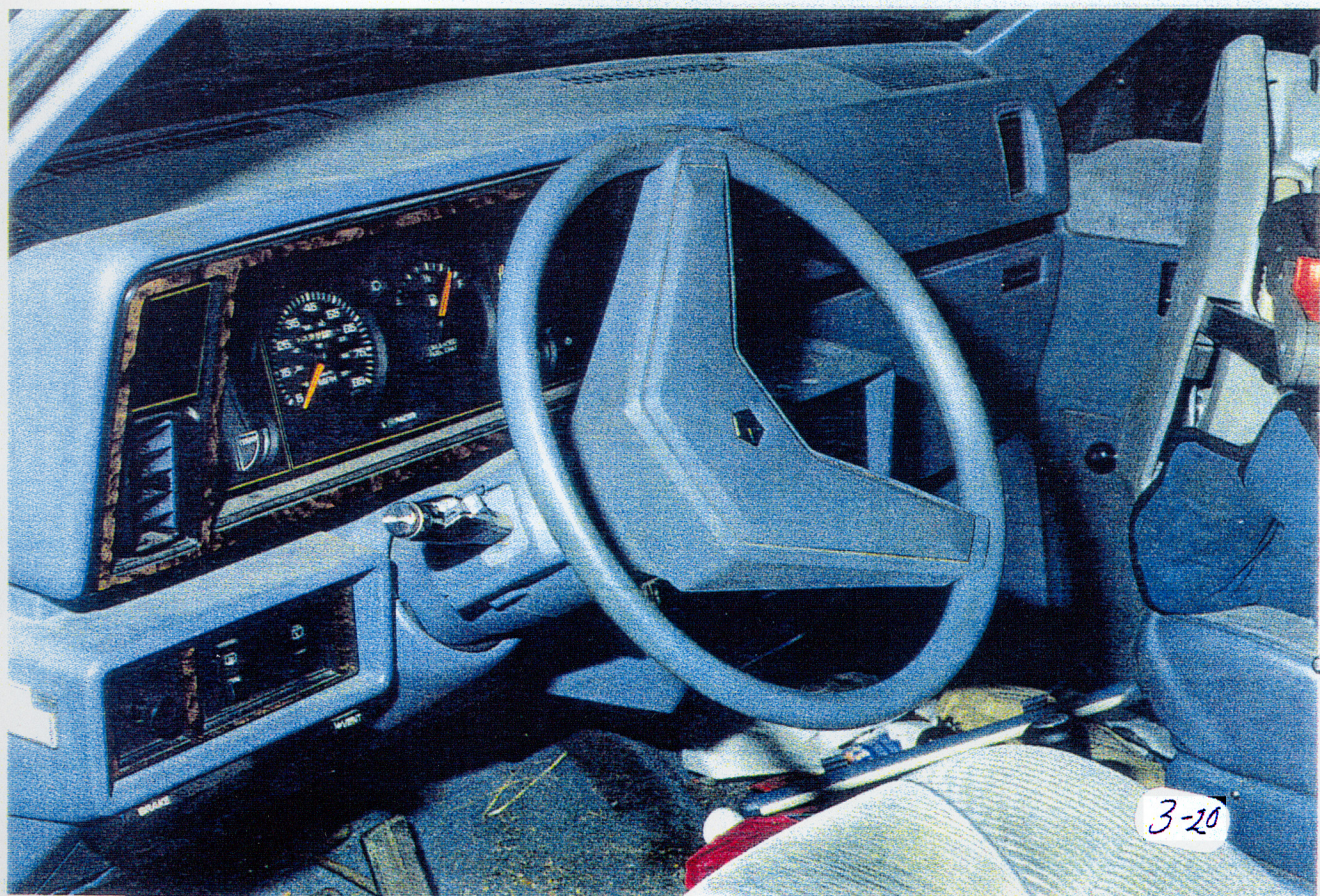


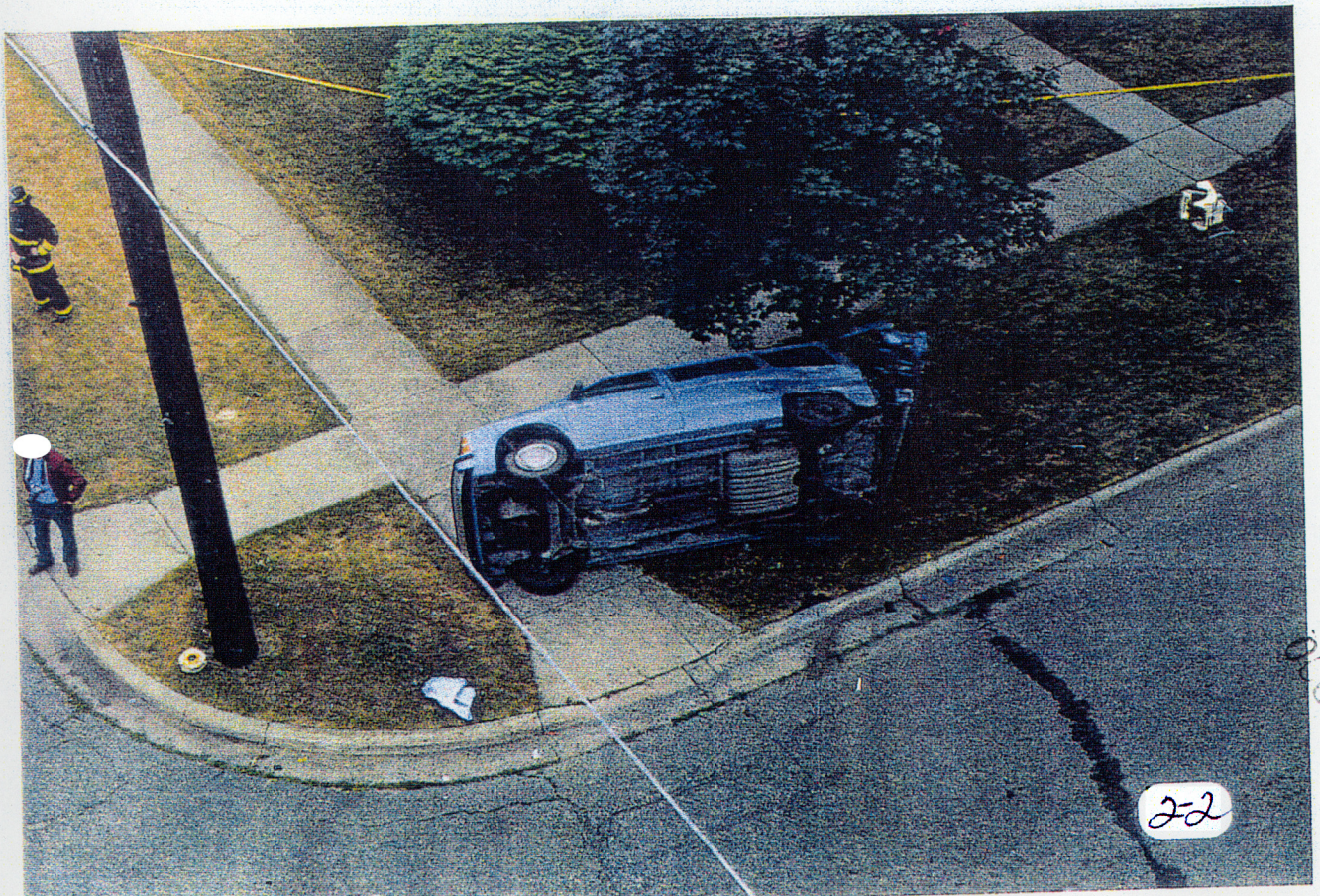
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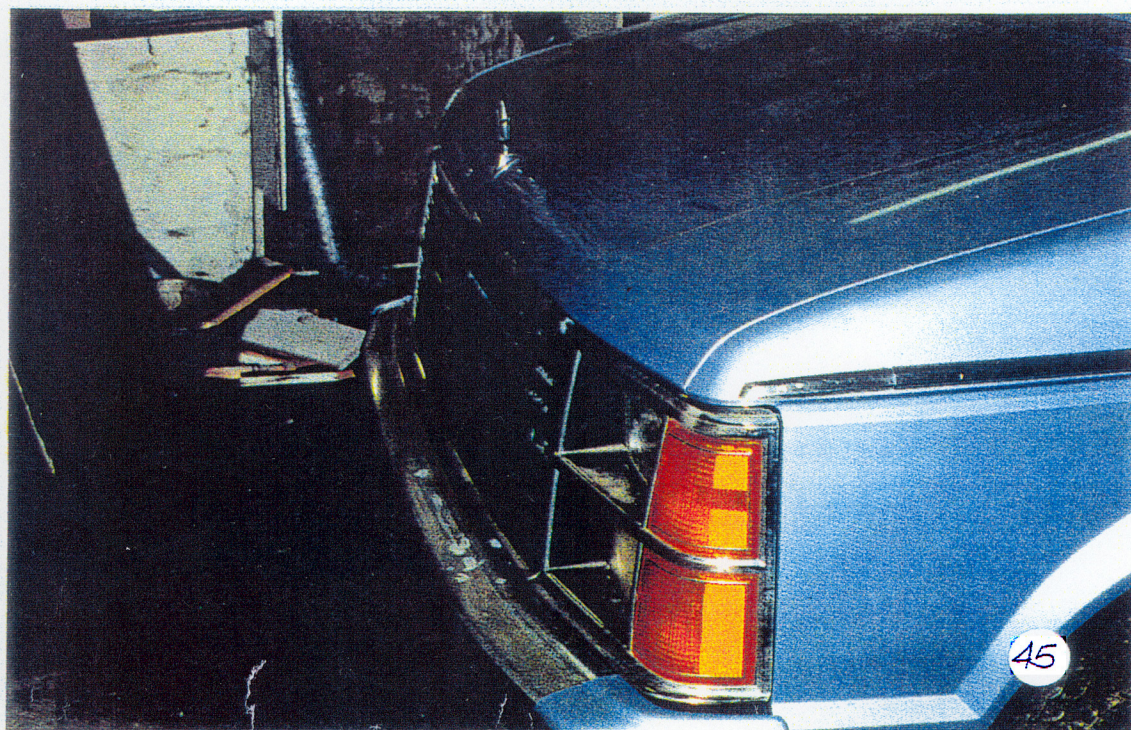
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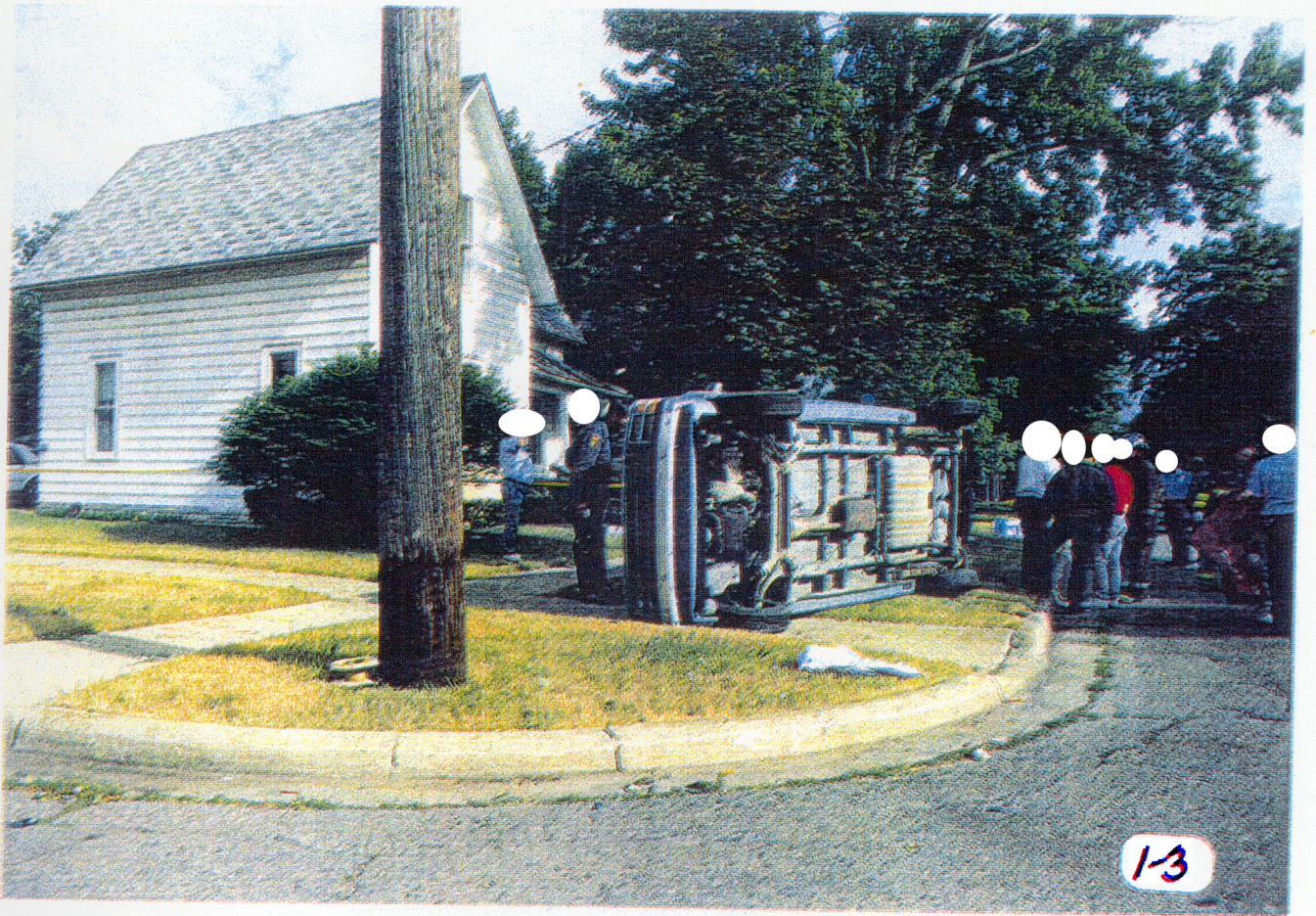




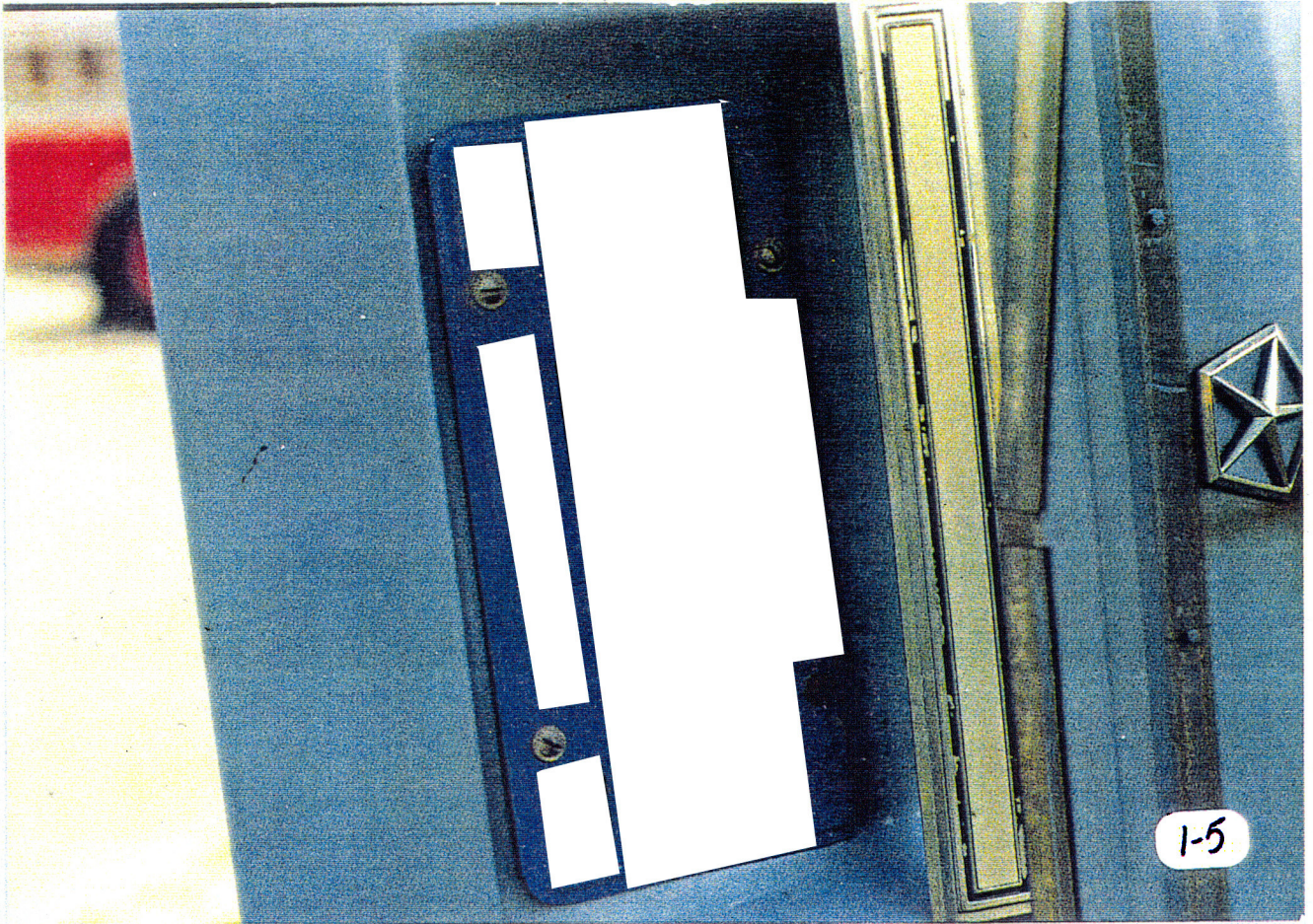


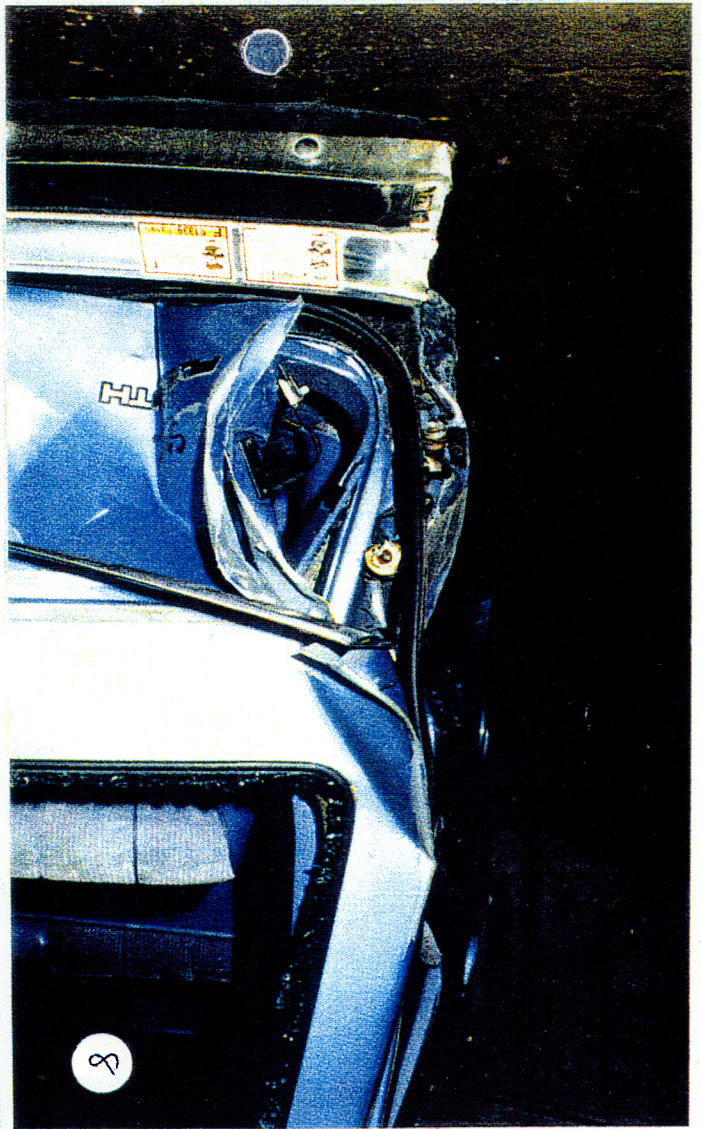
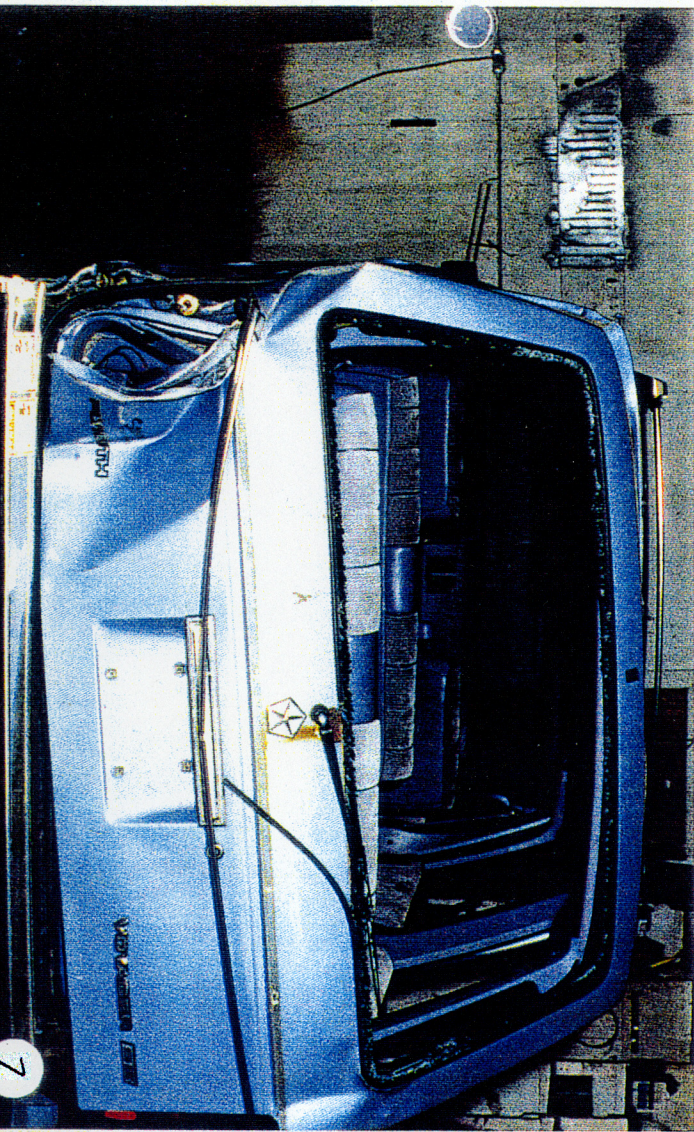
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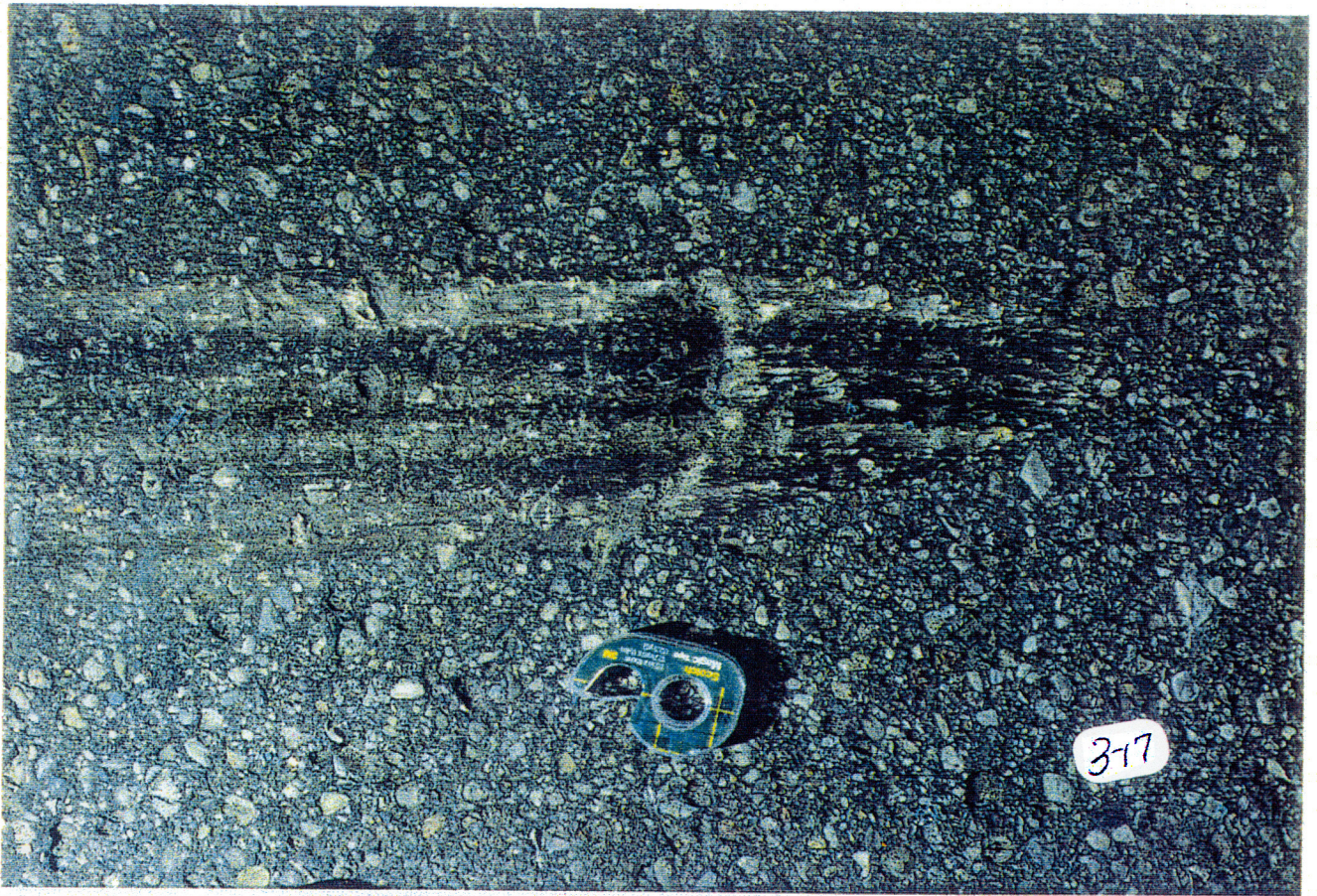


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100028



BEST AVAILABLE

000045

5.

FILE TYPE: Lawsuit

BEST AVAILABLE

FILE NAME:

COURT:

DOCKET NO:

STATUS: Pending

DATE OF INCIDENT: 1992

MODEL: Plymouth Voyager

MODEL YEAR: 1985

VIN: 2P4FH41C9

OWNER:

ALLEGED DEFECT: Defective childseat; defective rear door latch; defective rear seat lap belt; use of tempered glass in the rear hatch window

DESCRIPTION: was driving his 1985 Plymouth Voyager eastbound on . in with six members of his family present in the vehicle. was traveling southbound on in his 1977 Buick Century between 60-70 mph when he ran a yield sign and struck the vehicle broadside near the left rear tire. The Plymouth Voyager spun out of control, struck the curb and tipped over on the passenger side. During the accident sequence, it is alleged that the rear hatch opened and and who were belted and seated in the rear bench seat was strapped into a child seat), were ejected through the rear. was also belted in the rear bench seat and remained in the vehicle.

ANALYSIS: Unable to provide an analysis at this time. however, has confirmed that the liftgate opened during the accident sequence. Investigation is continuing in this matter.

INJURY: fatality
fatality
abdominal injuries
fractured shoulder
cracked sternum
concussion, contusions

000016

VEHICLE NO. ● ○ ○ ○

ARREST	Name	Charge	Ct. File No.	Ct. Date

Reported: Mo/Da/Yr		Time		A.M. P.M.		Damaged Property Other Than Vehicle YIELD SIGN		Precinct	
Photos by		Comp. Disposition Open Closed		Reviewer		Person Advised of Damaged Traffic Control Device		Owner Address	

State of
-AFFIDAVIT OF DEATH-

0507 1416

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VEHICLE NO.

2 4 6 8

REGISTRATION/STATE

GREATEST DAMAGE

1 2 3 4 5 6 7 8

3 - ROLLOVER

9 UNDERCARRIAGE
10 MULTIPLE
11 UNKNOWN, OTHER

EXTENT OF VEH. DAMAGE	
<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6	
DRIVEABLE	VEHICLE TYPE
<input type="radio"/> YES	<input type="radio"/> PA
<input type="radio"/> NO	<input type="radio"/> VA
TOTAL	<input type="radio"/> PU
OCCUP.	<input type="radio"/> ST
<input type="radio"/> 1 <input type="radio"/> 2	<input type="radio"/> MD
<input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/> CY
<input type="radio"/> 5 <input type="radio"/> 6	<input type="radio"/> MC
<input type="radio"/> 7 <input type="radio"/> 8	<input type="radio"/> GC
<input type="radio"/> 9 <input type="radio"/> 0	<input type="radio"/> SM
<input type="radio"/> 1 <input type="radio"/> 2	<input type="radio"/> OO
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<input type="radio"/> 5 <input type="radio"/> 6	
<input type="radio"/> 7 <input type="radio"/> 8	
<input type="radio"/> 9 <input type="radio"/> 0	

VEHICLE USE
☐ PRIVATE
☐ COMMERCIAL
☐ PURSUIT/EMERGENCY
☐ FARM
☐ SCHOOL/EDUCATION
☐ CLUB/CHURCH/(Y PLATE)
☐ MILITARY
☐ OTHER GOVERNMENT
☐ UTILITY (GAS, CABLE, PHONE)
☐ OTHER

SPECIAL VEHICLES
☐ POLICE ☐ AMBULANCE
☐ FIRE ☐ FARM EQUIP.
☐ BUS ☐ CONST. EQUIP.

VEHICLE DEFECT

☐ BRAKES

☐ LIGHTS/REFLECTORS

☐ STEERING

☐ TIRES/WHEELS

☐ WINDOWS

☐ OTHER _____

NON-COMMERCIAL
TRAILER CONFIG.
☐ UTILITY
☐ TRAVEL TRAILER
☐ BOAT TRAILER
☐ FARM EQUIP.
☐ TOWED AUTO
☐ RECREATIONAL DOUBLE
☐ OTHER

DEPT. OF STATE POLICE, CRIMINAL JUSTICE DATA CENTER

DATE MONTH DAY YEAR	TIME MILITARY	NO. OF VEHIC.	HOW	SPECIAL CIRCUMSTANCES	TOTAL LANES	FATAL (send FARS information)
00 00 00	00 00 00	00	00 HEAD ON 00 HEAD ON-LEFT 00 ANGLE 00 REAR END 00 REAR END-LEFT 00 REAR END-RIGHT 00 SIDESWIPE-SAME 00 SIDESWIPE- OPPOSITE 00 OTHER	00 DEER INVOLVED 00 SCHOOL BUS INVOLVED 00 SCHOOL BUS ASSOCIATED 00 HIT AND RUN 00 FLEEING POLICE PURSUIT	00 00 00 00 00 00 00 00	00 TRUCK/BUS 00 CORRECT COPY 00 NON- TRAFFIC EXCEPT SNOWMOBILE

WEATHER	DAYLIGHT	LIGHT	ROAD CONDITION
00 CLEAR 00 CLOUDY 00 FOG/SMOKE 00 RAIN 00 SNOW/BLOWING SNOW 00 SEVERE WIND 00 SLEET/HAIR 00 OTHER UNKNOWN	00 DAYLIGHT 00 DAWN 00 DUSK	00 DARK-LIGHTED 00 DARK-UNLIGHTED 00 OTHER UNKNOWN	00 DRY 00 WET 00 ICY 00 SNOWY 00 MUDDY 00 SLUSHY 00 DEBRIS 00 OTHER
COUNTY	CITY/TOWNSHIP	IF IN CONSTRUCTION ZONE	Mark one from each column
00 00 00	00 00 00	00 CONST. 00 MAINT. 00 UTILITY	00 LANE CLOSED 00 OFF-ROAD 00 OTHER
LOCATION Q NAME		ACTIVITY	RELATION TO ROADWAY
00 00 00		00 YES 00 NO	00 ON ROAD 00 MEDIAN 00 SHOULDER 00 OUTSIDE OF SHOULDER 00 GORE 00 UNKNOWN
NEAREST INTERSECTION		AREA	SPEED LIMIT
00 00 00		00 00 00	00 00 00
RIVER OF VEHICLE		1 2 3 4 5 6 7 8 9	DRIVER OF VEHICLE
00 00 00		00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00

FIRST NAME	MIDDLE	LAST	FIRST NAME	MIDDLE	LAST	STATE
00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00

STREET	CITY	ST.	ZIP	STREET	CITY	ST.	ZIP
00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00

SEX	LIC. TYPE	C.D.L. TYPE	SEX	LIC. TYPE	C.D.L. TYPE
00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00
AMBULANCE/HOSPITAL	POS.	REST.	AMBULANCE/HOSPITAL	POS.	REST.
00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00
INJURY	CITATION	C.D.L. EXEMPT.	INJURY	CITATION	C.D.L. EXEMPT.
00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00

VEHICLE DIRECTION	C.D.L. RESTRICTIONS	VEHICLE DIRECTION	C.D.L. RESTRICTIONS
00 00 00	00 00 00	00 00 00	00 00 00
ALCOHOL	HAZARD ACTION	ALCOHOL	HAZARD ACTION
00 00 00	00 00 00	00 00 00	00 00 00
DRUGS SUSPECTED	ACTION PRIOR TO CRASH	DRUGS SUSPECTED	ACTION PRIOR TO CRASH
00 00 00	00 00 00	00 00 00	00 00 00

UD-10 FORM NUMBER	INVESTIGATOR'S NAME(S)
00 00 00	00 00 00

FATAL TRAFFIC CRASH REPORT

BEST AVAILABLE

RELATED UD-10 FORM NUMBER: [] COMPLAINT/INCIDENT NUMBER: []
 POLICE AGENCY: []
 TYPE OF CRASH (HEADON, ROLLOVER, ETC.): [Rollover]
 DATE OCCURRED: [92] MILITARY TIME: []
 LOCATION:
 STREET NAME: [] NEAR INTERSECTION: []
 CITY/TWP: [] COUNTY: []
 POSTED SPEED LIMIT: [25] TRAFFIC CONTROL DEVICE: [YIELD SIGN]

ROADWAY: (PLACE "X" IN BOXES THAT APPLY)
 CONCRETE: [] BLACKTOP: [X] GRAVEL: [] DIRT: []
 STRAIGHT: [X] CURVE: [] HILLCREST: []
 LEVEL: [X] GRADE: []

ALCOHOL OR DRUG INVOLVED IN CRASH Y/N: [] (OFFICER'S OPINION)
 TIME EMS DISPATCHED: [] TIME EMS ARRIVED: []

VICTIM'S NAME [] DOB: [64] AGE: [8]
 ADDRESS: [] ZIP: []
 PERSON TYPE (DRIVER, PASSENGER, PEDESTRIAN, ETC.): [PASSENGER]
 DATE OF DEATH: [92] TIME: [] RELATIVES NOTIFIED Y/N: [Y]
 ALCOHOL/DRUG Y/N: [N] RESTRAINT: [03] AIRBAG: [3]
 EACH VEHICLE INVOLVED YEAR/MAKE/MODEL: [1977 Buick & 85 PLYMAN]

ADDITIONAL VICTIM(S):

#2 NAME: [] DOB: [] AGE: [15 mo]
 ADDRESS: [] ZIP: []
 PERSON TYPE (DRIVER, PASSENGER, PEDESTRIAN, ETC.): []
 DATE OF DEATH: [92] TIME: [] RELATIVES NOTIFIED Y/N: [Y]
 ALCOHOL/DRUG Y/N: [N] RESTRAINT: [06] AIRBAG: [3]

#3 NAME: [] DOB: [] AGE: []
 ADDRESS: [] ZIP: []
 PERSON TYPE (DRIVER, PASSENGER, PEDESTRIAN, ETC.): []
 DATE OF DEATH: [] TIME: [] RELATIVES NOTIFIED Y/N: []
 ALCOHOL/DRUG Y/N: [] RESTRAINT: [] AIRBAG: []

REMINDER - STATUTE 257.625A (10) REQUIRES THAT BLOOD SAMPLES BE TAKEN AND TESTED FOR ALL DECEASED DRIVERS.
 PLEASE FORWARD THE INITIAL UD-10 REPORT AND RELATED INVESTIGATIVE REPORTS WITHIN 10 DAYS OR AS SOON AS PRACTICAL TO:

DEPARTMENT OF STATE POLICE, CRIMINAL JUSTICE DATA CENTER.
 DO NOT UNDULY DELAY SUBMISSION OF THESE INITIAL REPORTS PENDING BLOOD TESTS OR PROSECUTION. SEND ADDITIONAL REPORTS WHEN AVAILABLE. THANK YOU

TO REPORT ALCOHOL/DRUG TEST RESULTS, PLEASE PHONE FARS UNIT AT

NR: []

000053

SUPPLEMENTAL REPORT

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS:

INFORMATION:

Below of a personal injury accident at the corner of and Streets in the city of Below listed officer responded in unit 37-24. Below listed officer came down Street and turned northbound onto

When below listed officer got closer to Street, he could see an older model Buick sitting in the boulevard of

At this time, below listed officer slowed down and asked if they were alright, at which time they stated they were. Below listed officer continued and could see numerous bodies laying in the grass and up by the house at the southeast corner of and At this time, below listed officer advised Central Dispatch to send another ambulance and as much help as possible and then exited the vehicle.

Below listed officer got out of his vehicle and noticed several people helping with injured children laying on the ground. At this time, one gentleman appeared to be giving CPR to a younger child and asked if he was all set and if he'd checked the other injuries and did not get a response. At this time, somebody stated to below listed officer that they thought somebody was still pinned underneath the van. The van was sitting on its right side with the rear of the vehicle facing in a southerly direction.

At this time, below listed officer entered the van and found one female sitting in the middle seat area, later identified as the wife of the driver, Below listed officer tried to check with to see if she had any injuries, while checking the rest of the van out for any other people, as one person had said somebody was trapped underneath the vehicle. was unable to give an answer and below listed officer then got down and looked underneath the right side of the vehicle that was laying on the ground to feel underneath and check if he could see anything.

At this time, the first ambulance arrived at the scene. Below listed officer came back out of the van and went around to the side and could see that the person that thought somebody was underneath the van saw was the foot of who was sitting in the van. At this time, the medical personnel took over. Below listed officer tried to make contact with everybody that was at the scene to get a name and see if anybody was a witness to the accident.

000054

WITNESSES:

Below listed officer first made contact with a stated that he did indeed see the accident. He stated he was out in the front of his residence when he saw the older vehicle, which he pointed out to below listed officer as the one sitting in the median of stated he saw the vehicle come southbound on and made the comment that he thought to himself that the speed the vehicle was going, he may not even be able to stop at which would be three more blocks down. He stated just then, the van entered the intersection going eastbound and the vehicle struck the rear end of it.

OTHER EYE WITNESSES:

This is the only eye witness below listed officer could find at the scene. The other people listed below were assisting at the accident scene itself.

1.

2.

These gentlemen were asked if they knew if the children were thrown from the vehicle or how they got out of the vehicle and at this time, stated that when he got to the back of the van, one child, later believed to be was hanging from the top of the vehicle in his seatbelt and stated that he cut the seatbelt and took him out, but he was not sure about how the other ones got out of the vehicle.

WITNESS PRIOR TO ACCIDENT:

 came to the accident later and talked to below listed officer and advised that the vehicle sitting in the median on came past his residence, which would be located two blocks to the north on This witness stated that when the vehicle got to and which has a yield sign also southbound and northbound, the vehicle was going southbound and when he hit the intersection, the vehicle accelerated. At this time, below listed officer asked for approximate estimated speed and stated he estimated the vehicle was travelling 50 to 60 mph. south of

000055

SUPPLEMENTAL REPORT

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS:

INFORMATION:

While investigating the accident, one of the people (who did not have identification on them) had made the statement that when he was up by the house with the one injured child, that the seatbelt was laying in the bushes with the child. Below listed officer went back over to investigate and discovered that the seatbelt looked like a seatbelt from a vehicle but was one of the straps that the emergency medical personnel use for their board and their gurney.

DICTATED BY:

TYPED BY:

'92

SUPPLEMENTAL REPORT

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 792
FILE CLASS:

COMPLAINT OF INJURY:

On 52, a made contact with in the lobby of the and complained of neck pain. is a 16 year old W/M, who stated that his neck has been bothering him since the accident. asked if he would like some medical treatment and stated that he would.

REQUEST FOR AMBULANCE:

The above information was passed on to the ambulance service and they were requested to respond to the in regards to this incident. Ambulance personnel arrived at the and the injured subject was turned over to them.

NOTIFICATION OF PARENT:

made contact with the mother of while waiting for the ambulance to arrive at the. She was informed of the above mentioned information and in fact did talk with her son

The subject in this supplemental report is 74 (for additional information/horsepower see original report).

OFFICER INVOLVED/DICTATED BY:

TYPED BY:

000057

BEST AVAILABLE

SUPPLEMENTAL REPORT

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS

INFORMATION:

When [redacted] reported for work shortly before 7:00 p.m., 1992, she was advised by Central Dispatch that there was a serious injury accident at [redacted] and [redacted] Streets. Since all on duty officers were there, [redacted] responded there to see if she could assist in any way.

[redacted] requested that [redacted] take the driver of one of the vehicles [redacted] to the hospital for a blood and urine test. [redacted] stated that he would consent to the test, but he kind of wavered back and forth. [redacted] then asked Officer [redacted] to fill out a search warrant for blood and take it to Magistrate [redacted] to swear to it.

[redacted] had Central Dispatch attempt to contact the Magistrate at his home, but there was no answer. While they paged him, [redacted] took [redacted] up to the city barns and re-fueled her patrol car. In the meantime, the Magistrate did contact Central Dispatch and advised that he was at the [redacted] in [redacted] then drove to [redacted] with [redacted] and swore out a search warrant. Magistrate [redacted] suggested that the police department contact the Prosecutor's Office to possibly get a regular search warrant done for the items that the police department was requesting. [redacted] requested that [redacted] then return to the police department rather than the hospital to have the blood drawn.

[redacted] returned to the police department with [redacted] spoke with [redacted] the conference room of [redacted] He explained that the department would like to have [redacted] consent to have blood drawn and a urine sample taken. [redacted] stated that he would agree to have those done. [redacted] then transported him to [redacted] ER.

The hospital patient registration worker filled out the paperwork, which [redacted] signed. [redacted] took him to the lab and there advised him of his chemical test rights from the [redacted] form. [redacted] told him "I am a peace officer, these are your chemical test rights". She at no time told him that he was under arrest for any offense.

Page two

In the first paragraph under chemical test rights on the form, it states "If you are asked to take a preliminary breath test prior to your arrest, you must still take the test I am about to offer you". After she said the work arrest, asked if he understood that he was not actually under arrest and stated that he did. After reading the rest of the chemical test rights to asked him if he would be willing to take a blood test and a urine test and stated he agreed to both. crossed out "breath test" on the form and had sign under both "blood test" and "urine test" and also put the time and date on the form. Also signed the form.

The lab technician on duty was She gave a urine collection cup and he went into the bathroom that is in the lab. Because and are both females, the actual urine sample was not witnessed. When came out of the bathroom, he gave the sample to and she filled the two urine bottles from the State Police kit.

then witnessed take approximately 20 ml. of blood from Because the Officer was requesting the blood for a drug test, it was not put into the tubes that come with the State Police kit. Instead, put the blood into two hospital tubes that have only a non preservative inert material in them that separates the serum from the cells.

The blood and urine samples were labeled by and placed back into the kit. She filled out the paperwork for it and sealed it. This was placed into the Police Department evidence refrigerator until it can be mailed or taken to the lab.

The blood search warrant which swore to and which Magistrate signed was never used. It is attached to this report and is to be returned to the District Court on 92.

INJURIES TO

had a very noticeable red mark on the left side of the base of his neck. asked him if he was hurt at all and stated that his side hurt a little bit but nothing else did. He also stated that the pain was "no big deal". While took to the hospital for the blood draw and the urine sample, she asked if he had any injuries for which he wanted to be treated and stated he did not.

INTERVIEW OF DRIVERS:

Below listed officer talked with the driver of the van, and asked him to make a statement about the accident. He stated that he was the driver of the van and was eastbound on Street. He stated when he got to Street, the vehicle going southbound was really going and struck the rear of his vehicle.

At this time, below listed officer asked about the passengers and their location. He stated that he was the driver, and that next to him in the passenger side in the front of the van was in the middle seat was the complainant's wife, and was in a child restraint seat. He stated in the back seat, in the middle, was who was also in a child restraint seat, and on the right side was and on the left side in the back seat was advised that all of the people in the van (himself, his wife, and all the children) did have restraints fastened while they were driving down the road.

The driver of the other vehicle was brought up to by had given his warning and asked, with that warning in mind, if he would talk to us about the accident. At this time, stated "yes" he would make a statement.

At this time, below listed officer asked if he could tell me what happened, at which time he stated that he was going southbound on He stated he was not going that fast and when he got to the corner of and , while he was going southbound, he stated that he did not see anybody and then all of a sudden there was a van there and they hit. At this time, below listed officer asked driver approximately how fast he thought he was travelling before the impact and stated "thirty five to forty mile an hour". The speed limit on is 25 mph.

INVESTIGATED BY:

assisted by and
and other officers of this department.

DICTATED BY:

Officer

TYPED BY:

POLICE DEPARTMENT
SUPPLEMENTAL REPORT

000060

BEST AVAILABLE

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS

INFORMATION:

Received a radio assignment from Central Dispatch to assist 37-24 at the scene of a PI accident located at the corner of _____ and _____ streets.

ARRIVAL:

At this time, undersigned arrived at the scene and observed a vehicle sitting facing in a westerly direction in the boulevard portion of _____ and near the intersection of _____ and _____ appeared a light blue van laying on its side. In addition to the two vehicles, I observed various emergency service personnel and injured subjects lying about yard and curbside of the scene. I immediately went to the intersection and there emergency and fire personnel were working on a number of injured.

At this time, traffic control was started and in addition to that, a request was made to Central Dispatch to make contact with the night shift to see if we could get an accident investigation personnel in early, along with notification of administration. The scene was secured and notification was made to _____ who was just north of the city and was en route to the scene. Also, arrangements were made to have accident investigation personnel at the scene in a short time.

At this time, undersigned made an attempt to identify and locate drivers and passengers in the various vehicles and to begin to reconstruct as much as possible what had happened.

Assistance was being given by the _____ County Sheriff's Department by _____. There were two officers from the Department of Public Safety of _____ one being _____ and the other _____. There were personnel from the Fire Department and two ambulance rigs were on the scene.

After the scene of the accident was secured as best we could and the care and transport of the injured was completed, an investigation started on the cause of accident.

_____ made the initial contact with the driver of both vehicles and I made contact with the passengers on the vehicle listed as the gray car on my report.

The first interview was with. W/M,
75, who stated that he was
a passenger in the car driven by and that he was located in
the middle in the back seat. He stated that he had just been picked up
at his residence at and that he
and had just gotten into the car and they
proceeded north on University to then took east to
and were southbound on when the accident happened. He
stated that he thought they might be travelling 35 to 40 mph. He
stated that he was not aware of the van until just before the accident,
when the driver had suddenly slammed on the brakes. He
stated that from that point on, he doesn't recall what happened and
thought that he might have blacked out.

At this time, I interviewed W/M,
73, University, who stated that he was
in the back seat on the passenger side and that he and his friend.
had just been picked up at by and
that they had gone north from his residence, east to (he didn't
know what street) and were southbound on Street when he stated
suddenly the driver put on his brakes and he heard the tires squealing
and suddenly they hit the van. He stated that he had not seen the van
prior to the accident and he had no idea what the speed of the vehicle
that he was riding in was.

In addition to the two passengers in the vehicle involved in the
accident, I did make contact at the scene with a
W/M, 58, who resides at which is approximately
four blocks north of the accident scene. He stated that he was in his
house and heard the vehicle travelling at a high rate of speed, at such
a speed that he was about to call the police because of the
recklessness of the vehicle, when he suddenly realized that it had been
involved in an accident at the corner of and According
to this witness, this was not the first time that the vehicle had been
in the neighborhood driving recklessly.

After the interview with the two passengers, I had re-contact with
the driver of the vehicle, and explained to him that as
part of the accident investigation I would be advising him of his
constitutional rights, which I read from a card that I then had him
sign and I dated and indicated the time on it. I asked him if he
wished to make any statements concerning the accident and he stated
that he did. He stated that he was driving southbound on Street
and that he might have been travelling 35 to 40 mph., but he did not
see the van and he stated that it was suddenly in the intersection and
he struck it broadside.

I asked him if he had had anything to drink and he stated that he doesn't drink and had not had anything to drink. I asked him if he would submit to a preliminary breath test, which he agreed to. The preliminary breath test machine was provided to me by from DPS and upon completion of that test, it indicated that the subject had no reading whatsoever on that machine.

After the work at the scene, and I went to the Hospital emergency room and made contact with who is the supervising nurse. She stated that at this time they did have two subjects who were deceased as a result of the accident and identified those as years old, and 15 months old. She stated that there were two others scheduled for emergency surgery and two others whose injuries they had not been able to get at, but they appeared to be minor.

She also stated that the father of the children, was with of their administration office, and a priest and they were taking care of the notification of the relatives that had requested be notified. She stated that was not able at this time to be interviewed and she would talk with him and his priest and if it became such that we could, she would notify us as to his availability. At this point, she stated that, if he was injured, it was very minor and they did not anticipate admitting at this point.

At this time, because of the great amount of activity in the emergency room, and I went to the ambulance area and obtained the names of the emergency service people that had responded to the accident and they were as follows. The first ambulance dispatched was 13-5, manned by and The second responding rig was occupied by and In addition to that, a County ambulance (Lincoln 1-07), manned by and responded.

After the initial transport, both 13-5 and 13-6 returned to the scene for additional transport. In addition to the on duty people that responded, one other EMT responded In the addition to the medical emergency people that responded, Fire Department and volunteers and first responders were also on the scene.

Dictated by:

Typed by:

POLICE DEPARTMENT 000063
SUPPLEMENTAL REPORT

BEST AVAILABLE

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS:

INFORMATION:

Received a request from to contact one of the passengers in the vehicle involved in the accident. The person to be contacted is listed as The address given was

There is no such address at the actual address is , but the young lady insists that she lives on This is the house on the corner of and The telephone number for that residence is

Contact was made with the young lady at and she is identified as W/F, DOB stated that she was a passenger in the vehicle driven by She stated that she and were in the front seat and there were three other people in the back seat. stated that they were going down which would be southbound. She stated she did not know the actual speed of vehicle but knew that they were travelling faster than the speed limit. She stated that as the vehicle approached the intersection of and she saw the van crossing in front of them. At first she thought they would miss the van, but then realized that they were not going to miss it. She stated that at that point, she covered her face with her arms and the rest of it is just a blur. She stated she has very little recollection of the actual crash.

stated that as they approached the intersection, the driver attempted to slow for the yield sign, but was travelling at such a rate of speed that he could not stop and they did slide into the van

This concluded statement and the only other question she had was who was insured with, due to the fact that she had to go to Hospital for her injuries.

Dictated By:

Typed By:

92
3:15 p.m.

POST AVAILABLE

DATE: 92
FILE CLASS:

On 92 at the scene of this incident, was requested by to interview who was a passenger in the vehicle driven by involved in the incident.

Street, W/M, DOB

stated that he was in the back seat behind driver in the 1977 Buick. stated that they were southbound on Street approaching Street. stated that he guessed they were travelling about 35 MPH, 40 MPH, or 45 MPH.

stated that they slowed down as they neared the intersection a little bit, but did not believe they were going to stop.

stated that all of a sudden, he felt that the driver had "slammed" on the brakes and that the brakes locked up. stated that at this time, he saw the vehicle eastbound on Street and stated that they hit this vehicle. stated that he did not see the other vehicle prior to when the brakes were locked up by driver

stated that he was not injured; however, he stated that it hurt a little when the brakes locked up as he had his lap belt on in the back of the vehicle.

OFFICER INVOLVED/DICTATED BY:

TYPED BY:

POLICE DEPARTMENT
SUPPLEMENTAL REPORT

000065

BEST AVAILABLE

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS:

On 92 at approximately 1:00 p.m., had conversation with of the is involved with the accident reconstruction and requested that he assist this department in the investigation of this incident. stated that he would in fact assist this department in the investigation of this fatal accident. and then had conversation in regards to some of the details of this investigation and will work with in regards to this investigation.

CONTACT OF CONCERNED CITIZENS:

On 92 at approximately 1:20 p.m., received a phone call from a in regards to the PI accident.
W/F, DOB TX#

requested make a report of the information she passed on to him so that the Prosecutor would be aware of it. stated that in the recent past, she had been having problems with vehicles in her neighborhood drag racing and "pulling brookies" around her children and property. stated that she knew it was just a matter of time before the vehicle hit something or somebody. stated the license number of the vehicle she has been having trouble with is (This is the registration on vehicle #1 driven at the time of the accident driven by Ash stated she does not know who the owner or the driver of the vehicle was at the time she was having problems, but stated that there is an ongoing problem with this vehicle in her neighborhood.

ASH further wanted the name of added to this report as also observed the problems that was having with the vehicle in the area of Road and Roads). This information is being added to the report simply at the request of and for the Prosecutor's information.

ADDITIONAL PHOTOS:

At the time of this accident, a County Sheriff Department Photographer was passing by. photographed the

000066

92/Supplemental
Page 2

BEST AVAILABLE

scene and delivered to
incident.

25 photos of the scene of this

the photographer for County Sheriff
Department, TX#

Photographs have been attached to the original file of this
complaint.

BLOOD SAMPLE:

Blood sample was obtained on driver This sample
will be sent US mail on 92 in the early afternoon to
Toxicology Crime Lab. The results of the testing of this blood will be
attached to the report upon receipt from the Lab.

STATUS:

This complaint remains open pending further investigation.

OFFICER INVOLVED/DICTATED BY:

TYPED BY:

B2 .
3:45 p.m.

000067

DATE: 92
FILE CLASS:

The majority of the damage to this vehicle was the left front portion of the vehicle.

000068

BEST AVAILABLE

92/Supplemental
Page 2

#2 1985 Plymouth van, blue in color, registration
VIN# 2P4FH4 mileage 96,399.1.

The damage to this vehicle from the initial contact of vehicle #1 was to the left rear quarter panel. The vehicle did sustain other damage as it rolled over on its side at the end of its skid.

ROADWAY:

This PIA occurred in the intersection of _____ and _____ Streets in the City of _____. The road itself is a black top surface and is in good condition.

WEATHER CONDITIONS:

At the time _____ was called to the scene, the weather conditions were approximately 58 degrees, overcast, no wind, low humidity.

WITNESSES:

See attached supplemental reports.

ARRIVAL ON SCENE:

Upon arrival at the scene of the PIA, _____ noted that there were two vehicles involved in the accident. _____ was advised by _____ of _____ that vehicle #1 (the '77 Buick driven by _____ had apparently run through the southbound yield sign on _____ Street at _____ striking the '85 Plymouth van driven by _____ advised further that there was a possibility that some deaths may result from the accident.

_____ could see two lengthy skid marks which were in the southbound lane of _____ and proceeded across the intersection and to where vehicle #1 was sitting. There were two gouges left in the intersection which apparently were made by vehicle #2 as it was spinning after it was struck by vehicle #1.

000069

BEST AVAILABLE

92/Supplemental
Page 3

While [redacted] was checking the scene of the accident, he asked [redacted] for assistance from [redacted] who is currently being trained in accident investigation. request was granted and at this time [redacted] was requested to be contacted by [redacted] through Central Dispatch.

MEASUREMENTS TAKEN:

[redacted] and [redacted] took measurements of the scene using the coordinate method. [redacted] and [redacted] measured two the vehicles involved, as well as skid marks, gouges, and traffic control devices. (See attached measurements).

SCALE DRAWING:

From the measurements taken at the scene, [redacted] as well as [redacted] drew a scale drawing of the accident scene. This drawing will accompany this report.

WRECKERS:

[redacted] was contacted to tow the vehicles involved in this PIA. Both vehicles were towed to [redacted] where they were impounded until further notice from this department.

REQUESTED ASSISTANCE FROM [redacted] RECONSTRUCTIONIST:

Due to the extensive skid marks at this accident and the travel distance between impact and where vehicle #2 came to rest, requested that a [redacted] Reconstructionist be used to conclude a speed of vehicle #1. [redacted] briefly talked with [redacted] of [redacted] on 92 at approximately 1:30 p.m. At this time, it was discussed that on 92 at approximately 2:00 p.m., [redacted] and [redacted] would meet with [redacted] to go over the facts of this investigation and produce a final report and outcome of the investigation.

000070

BEST AVAILABLE

92/Supplemental
Page 4

STATUS:

This report will remain open pending further investigation.

OFFICERS INVOLVED:

and

Dictated By:

Typed By:

92
8:25 a.m.

000071

LEGEND TO SCALE DRAWING

BEST AVAILABLE

- A RP 1
- B RP 2
- C Water Main
- D Body by
- E Gouge from Vehicle 2
- F Gouge from front tire Vehicle 2
- G Base of Yield sign
- H Gouge from Vehicle 1 under carriage
- I Bush 5' 6" diameter, 5' height
- J Yield sign

000072

VEHICLE #1

BEST AVAILABLE

1977 gray Buick, two door, mileage 74,525.8
All glass in tact.

VEHICLE #2

1985 Plymouth Voyager SE minivan, blue in color,
VIN# 2P4FH4 mileage 96,399.1

Glass broken - left driver's center side window, rear side window
- right center side window, rear side window
- rear hatch window

Left rear back seat, seat belt cut

Inspection made 92 at 9:20 a.m. by

STATE OF
DEPARTMENT OF STATE POLICE
FORENSIC SCIENCE DIVISION
LABORATORY
TOXICOLOGY SUBUNIT

BEST AVAILABLE

000073

TOXICOLOGY REPORT

Laboratory No.

Received By

Delivered By : Police Class Mail

Agency

Police Dept.

Record No.

Date Received 92

Time Received : 09 00 AM

File Class

Date Completed 92

Agency No.

Subject

Findings - Reported

- Seal of Michigan State Police Specimen Kit (Barber) containing:
 - 1 - Tube with approx. 10 ml. blood
 - 1 - Tube with approx. 5 ml. blood
 - Bottle #1: 30ml urine
 - Bottle #2: 30ml urine
- Blood specimens in red top corvac tubes

Results of Analysis:

0.00% Blood Alcohol

Additional examinations will be conducted on the submitted specimens.
Results of those examinations will follow at a later date.

RECEIVED

1992

Police Department

Laboratory Scientist

IMPORTANT: THE SPECIMEN(S) WILL BE DISCARDED 30 DAYS AFTER
REPORTED DATE UNLESS INSTRUCTIONS ARE RECEIVED
ASKING US TO RETURN SAME.

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Gouge from Vehicle #2

BEST AVAILABLE

RP	NORTH	SOUTH	000074 EAST	WEST
1	35' 3"		16' 9"	
=====				
	SCUFF MARK FROM VEHICLE #1			
1	59' 8"		13' 7"	N. End
1	53' 8"		13' 7"	S. End
		MARK 2-2½" WIDE		
=====				
	VEHICLE #1 FINAL RESTING SPOT			
1	Right Front	130' 0"	25' 8"	Vehicle #1 Wheel Base 9' 5"
1	Right Rear	129' 6"	35' 0"	
1	Left Front	135' 10"	27' 2"	
1	Left Rear	134' 5"	35' 8"	
=====				
	VEHICLE #2 FINAL RESTING SPOT			Wheel Base 9' 5"
2	Right Front	N - 28' 5"	6' 5"	Width 5' 7" (front)
2	Right Rear	N - 19' 6"	3' 0"	
=====				
		BODY BY HOUSE		
2	1' 2"		30' 11"	
=====				
		YIELD SIGN		
2	21' 11"		3' 8"	

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Right Front Tire Skidmarks
Vehicle #1 (continuing after impact)

BEST AVAILABLE

RP	NORTH	SOUTH	EAST 000075	WEST
1	30' 0"		12' 1"	
1	20' 0"		13' 3"	
1	15' 0"		14' 1"	
1	10'		14' 9"	
1	5'		15' 11"	
RP 1	RP 1		16' 10"	
1		5" 0'	17' 10"	
1		10" 0"	18" 8"	
1		15" 0"	19" 7"	
1		20" 0"	20" 7"	
1		25" 0"	21" 9"	
1		30" 0"	22" 6"	
1		35" 0"	23" 1"	
1		40" 0"	23" 8"	
1		45" 0"	24" 1"	
1		50" 0"	23" 11"	
1		55" 0"	23" 4"	Last Visible

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Skidmarks from Vehicle #1
Left Front

BEST AVAILABLE

000076

RP	NORTH	SOUTH	EAST	WEST
1		60' 0"	17' 1"	
1		65' 0"	16' 4"	
1		70' 0"	15' 9"	
1		75' 0"	15' 4"	
1		80' 0"	14' 9"	
1		85' 0"	14' 6"	
1		90' 0"	14' 4"	
1		95' 0"	14' 6"	
1		100' 0"	14' 9"	
1		105' 9"	15' 2"	
1		110' 0"	16' 2"	
1		115' 0"	17' 3"	
1		120' 0"	10' 5"	
1		125' 0"	21' 7"	
1		130' 0"	23' 7"	

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Skid Marks from Left Side
Vehicle #1 Pre-Impact to Impact

BEST AVAILABLE

RP	NORTH	SOUTH	000077 EAST	WEST
1	124' 0"		15' 7"	
1	114' 0"		15' 8"	
1	104' 0"		15' 11"	
1	94' 0"		16' 2"	
1	84' 0"		16' 1"	
1	74' 0"		16' 1"	
1	64' 0"		16' 4"	
1	54' 0"		16' 4"	
1	44' 0"		16' 5"	
1	40' 2"		16' 4"	
		- END OF STRAIGHT SKIDS -		
1	38' 0"		16' 6"	
1	35' 5"		16' 9"	

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Skid Marks from Right Side
Vehicle #1 Pre-Impact to Impact

BEST AVAILABLE

RP	NORTH	SOUTH	EAST 000078	WEST
1	109' 3"		10' 6"	
1	99' 0"		10' 10"	
1	89' 0"		10' 11"	
1	79' 0"		10' 11"	
1	69' 0"		10' 11"	
1	59' 0"		11' 1"	
1	49' 0"		11' 2"	
1	39' 8"		11' 2"	Last Straight
1	37' 0"		11' 5"	
1	35' 0"		11' 7"	
<hr/>				
NORTHBOUND	STREET NORTH OF		21' 3"	Wide
SOUTHBOUND	STREET NORTH OF		21' 5"	Wide
BLVD. NORTH OF			20' 10"	Wide
STREET EAST OF	STREET		29' 8"	Wide
NORTHBOUND	STREET SOUTH OF		20' 10"	Wide
SOUTHBOUND	STREET SOUTH OF		21' 4"	Wide
BLVD. SOUTH OF			21' 1"	Wide
STREET WEST OF	STREET		29' 10"	Wide

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION:

BEST AVAILABLE

RP	NORTH	SOUTH	EAST	WEST
2	38' 9"		7' 5"	
=====				
	TELEPHONE POLE (#840) N. WEST CORNER - (HAS STREET SIGNS			
1	64' 2"			4' 5"
=====				
	YIELD SIGN	NORTHWEST	CORNER	
1	80' 7"			2' 2"
=====				
	NORTHWEST CORNER -	CHORD 12' 0"	M - 1' 8"	
	NORTH BLVD. -	CHORD 16' 0"	M - 3' 9"	
	NORTHEAST CORNER -	CHORD 17' 0"	M - 3' 0"	
	SOUTHEAST CORNER -	CHORD 18' 0"	M - 3' 9"	
	SOUTH BLVD. -	CHORD 14' 0"	M - 2' 11"	
	SOUTHWEST CORNER -	CHORD 14' 0"	M - 1' 10"	
=====				
RP 1 -	27' 11" of	INTERCEPT SOUTHWEST CORNER (INTERSECTION)		
RP 2 -	42' 8" of	INTERCEPT SOUTHEAST CORNER (INTERSECTION)		
RP 1 -	8' 5" of	WATER SHUTOFF VALVE SOUTHWEST CORNER		

000079

ITEM MEASURED/DESCRIPTION: Gouge from Vehicle #2
Left Front Tire

[illegible]

P.D. ACCIDENT RECONSTRUCTION

ITEM MEASURED/DESCRIPTION: Skid Marks from Right Rear Vehicle #1 (after impact)

BEST AVAILABLE

RP	NORTH	SOUTH	EAST	WEST
1	RP 1		10' 3"	
1		5'	10' 8"	
1		10'	11' 0"	
1		15'	11' 4"	
1		20'	11' 9"	
1		25'	12' 4"	
1		30'	12' 10"	
1		35'	13' 7"	
1		40'	14' 3"	
1		45'	15' 2"	
1		50'	16' 0"	
1		55'	16' 10"	
1		60'	17' 11"	

180000

ORIGINAL INCIDENT
REPORT PAGE 1

ORIGINAL DATE 1992		INCIDENT NO. BEST AVAILABLE	
TIME RECEIVED 10:00 A		FILE CLASS	
WORK UNIT		COUNTY	
COMPLAINANT 000082		POLICE DEPARTMENT	
ADDRESS: STREET AND NO.		TELEPHONE NO.	
CITY		STATE	ZIP
INCIDENT STATUS 7			
TOT OTHER POLICE DEPARTMENT			
NATURE OF INCIDENT			

REQUEST SPEED DETERMINATION ON VEHICLES INVOLVED IN A DOUBLE FATALITY ACCIDENT

INFORMATION: 92)

This officer received a telephone request from of the Police Department. requested a speed determination on a traffic crash his Department was investigating.

VENUE:

This crash occurred at the intersection of and Street in the City of

IDENT DESCRIPTION:

1977 Buick was traveling southbound on Street and struck the left rear section of 1985 Plymouth van which was traveling eastbound on Two children in the Plymouth van were ejected and killed.

CONTACT POLICE DEPARTMENT: 92)
This date officer was contacted at the Police Department. The investigation to date was discussed. The report and scene photographs were obtained and reviewed, including a large scale drawing of the scene.

SCENE: 92)
This date this officer reviewed the scene at and Streets. The coefficient of friction and scene photographs were also obtained by this officer.

VEHICLE REVIEW: 92)
The vehicles were located at A-1 Towing Service in Both vehicles were reviewed.

STRAINT SYSTEM:

The review of the police report indicated that the two children that were killed during the crash had been ejected from the vehicle. One in a child seat. The report also gave their positions as being in the rearmost bench seat in the van.

PAGE 1	INVESTIGATED BY	REPORTED BY	REVIEWED BY
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ORIGINAL DATE 1992	INCIDENT NO. BEST AVAILABLE
TIME RECEIVED 10:00 A	FILE CLASS

EXAMINATION:

The child seat examined was a Strolee Model 618. 84. for use on children 18 - 40 lbs. and less than 42 inches in height.

The seat was bent to the right. No loading marks or signs of seat belt webbing marks were noted on the seat. The main harness straps were still connected and fastened.

See photographs.

Examination of the lap belt system for the rear seat showed that all the belts were disconnected at the time of this exam.

- 1) The left rear belt (female end) had been cut with a knife or scissors. The female end was broken open and the insides were missing. The male section of the belt was pulled out more than normal and was held in the position by the bent wheel well pushing up against the inside section of the seat.

This appears to be the belt used by Josh. age 11 years who received an "A" type injury.

Photographs taken.

- 2) The center belt was also disconnected at the time of this examination.

The male buckle shows a large amount of scratch marks on the metal, indicating that it is used often. A very slight amount of what appears to have been loading marks both on the male and female connectors. This belt is not a retractable type belt, and appears to have been the one used for the child seat. This position would have been that of the 1-year-old who received "K" type injuries when ejected.

Photographs taken.

- 3) The right side rear belt was also disconnected at the time of this inspection. This belt (male section) was retracted to its normal position.

A very slight amount of what appears to be loading marks show on both the male and female ends.

This position would be that used by 8 years. who also received a "K" type injury.

It does not appear that the child seat was properly secured with the seatbelt. also it does not appear that the belt of the right rear seat was worn. or if so, it was not worn correctly.

Photographs taken.

000083

PAGE 2	INVESTIGATED BY	REPORTED BY	REVIEWED BY
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Page three

SUPP

92

000084

BEST AVAILABLE

ADDITIONAL:

After the samples were taken, returned with to the
Police Department, where he was released.

INVESTIGATED/DICTATED BY:

TYPED BY:

b2
9:20 a.m.

Read the complete page to the arrested person.

BEST AVAILABLE

I am a peace officer. You are under arrest for the offense of: *(Read only the charge that applies)*

- Operating a vehicle while under the influence of an intoxicating liquor or a controlled substance or a combination of both, or with a blood alcohol content of point one zero percent or more, by weight of alcohol.
- Operating a vehicle while visibly impaired due to the consumption of an intoxicating liquor or a controlled substance or a combination of an intoxicating liquor and a controlled substance.
- Operating a vehicle while under the influence of an intoxicating liquor or a controlled substance or a combination of both, or with a blood alcohol content of point one zero percent or more, by weight of alcohol and causing the death of another.
- Operating a vehicle while under the influence of an intoxicating liquor or a controlled substance or a combination of both, or with a blood alcohol content of point one zero percent or more, by weight of alcohol and causing a long-term incapacitating injury to another.
- Murder resulting from the operation of a motor vehicle.
- Manslaughter resulting from the operation of a motor vehicle.
- Felonious Driving.
- Negligent Homicide.

000085

CHEMICAL TEST RIGHTS

will be requesting that you take a chemical test to determine the percentage of alcohol and/or sence of a controlled substance in your blood. IF YOU WERE ASKED TO TAKE A RELIMINARY BREATH TEST PRIOR TO YOUR ARREST, YOU MUST STILL TAKE THE TEST I M ABOUT TO OFFER YOU.

If you refuse to take this chemical test, it will not be given without a court order, but I may seek to obtain such a court order. Your refusal to take this test shall result in the suspension of your license or operating privilege for six months or one year for a subsequent refusal, and the addition of six points to your driving record.

After taking my chemical test, you have a right to demand that a person of your own choosing administer a breath, blood, or urine test. You will be given a reasonable opportunity for such a test. You are responsible for obtaining a chemical analysis of a test sample taken by a person of your own choosing.

The results of both chemical tests shall be admissible in a judicial proceeding, and will be considered with other competent evidence in determining your innocence or guilt.

Will you take a: *(Select the appropriate test from the following list)*

Breath Test?

or

* Blood Test?

2. URBAN INSTRUCTIONS

and
or

Urine Test?

8:40 p.m.

92

yes

Notice to Peace Officer: 1) Take the arrested person's driver license and destroy it. Issue the two white pages of this document to the arrested person. 2) Notify the Department of State by LEIN.

92

provides that a person afflicted with hemophilia, diabetes, or a condition requiring the use of an anticoagulant shall not be considered to have given consent to the withdrawal of blood.

Department of State Police

ALCOHOL OR DRUG DETERMINATION

NOTICE:

NOT TO BE USED FOR SUBMISSION OF
DEFENDANT'S PERSONAL SAMPLE FOR
ALCOHOL ANALYSIS.

PLEASE PRINT LEGIBLY

PLEASE CHECK ALL APPROPRIATE BOXES

NAME OF SUBMITTING AGENCY <i>PD</i>		COMPLAINT NO.	
STREET			
STATE	ZIP CODE	COUNTY NO.	CITY NO.
		<i>37</i>	<i>67</i>
DRIVER'S LICENSE		DOB: MO/DA/YR	
		<i>75</i>	
SPECIMEN TAKEN FROM		LAST NAME	
<input checked="" type="checkbox"/> M <input type="checkbox"/> F		FIRST NAME	
SIGNATURE OF PERSON TAKING SPECIMEN			
SIGNATURE OF OFFICER PRESENT			
DATE OF INCIDENT		TIME OF INCIDENT	
<i>11/2</i>		<i>5:30</i>	
DATE AND TIME SPECIMENS COLLECTED			
Blood Specimen		TIME	
<i>92</i>		<i>4:00</i>	
VIAL NO. 1 SPECIMEN		TIME	
<input checked="" type="checkbox"/> BLOOD <input type="checkbox"/> URINE		<i>92</i>	
<input type="checkbox"/> other		<i>4:11</i>	
VIAL NO. 2 SPECIMEN		TIME	
<input type="checkbox"/> BLOOD <input checked="" type="checkbox"/> URINE		<i>92</i>	
<input type="checkbox"/> other		<i>8:46</i>	
DO NOT FREEZE SAMPLES			

SUBJECT INFORMATION	
<input checked="" type="checkbox"/> DRIVER	<input type="checkbox"/> PASSENGER
<input type="checkbox"/> PEDESTRIAN	<input type="checkbox"/> OTHER
<input checked="" type="checkbox"/> LIVING	<input type="checkbox"/> DECEASED
CRIMES AGAINST PERSON	
<input type="checkbox"/> 0900-1 (Murder/Non-Negligent Manslaughter)	
<input type="checkbox"/> 0900-2 (Negligent Manslaughter)	
TRAFFIC	
<input type="checkbox"/> 5400-1 (Accident, Hit & Run)	<input type="checkbox"/> FATAL
<input type="checkbox"/> 5400-2	<input type="checkbox"/> OUIL
<input type="checkbox"/> Manslaughter	<input type="checkbox"/> Felonious Driving
<input type="checkbox"/> Negligent Homicide	
TRAFFIC (Exc. Citation Codes)	
<input checked="" type="checkbox"/> 9300-1 (Accident, Traffic)	<input checked="" type="checkbox"/> FATAL
<input type="checkbox"/> 9300-1 (Accident, Traffic)	<input type="checkbox"/> FATAL
FIRE	
<input type="checkbox"/> 9500-1 (Accident, Fire)	
MISCELLANEOUS	
<input type="checkbox"/> 9900-1 (Suicide)	<input type="checkbox"/> 9900-2 (Natural Death)
<input type="checkbox"/> Auto Exhaust	<input type="checkbox"/> 9900-8 (General Assistance)
<input type="checkbox"/> Drug Overdose	<input type="checkbox"/> Other ()
WAS SUBJECT CITED FOR BREATH TEST REFUSAL? <input type="checkbox"/> YES <input type="checkbox"/> NO	
BREATHALYZER RESULTS	
Test No. 1 (Time)	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m. 0. %
Test No. 2 (Time)	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m. 0. %
P.B.T. RESULTS	
Test No. 1 (Time)	<input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m. 0. <i>000</i> %
Test No. 2 (Time)	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m. 0. %

ADDITIONAL REMARKS:

Fire in hospital tubes. The tubes contain a chemical that will not affect drug tests. Please test for the presence of drugs.

INSTRUCTIONS FOR TAKING OF SAMPLES

TO PHYSICIAN OR NURSE (if blood sample is taken):

- Do not use alcohol or alcoholic solution to sterilize skin surface, needle, or syringe.
- Draw 20 cc of venous blood from subject in presence of law enforcement officer, and tell the subject IN THE OFFICER'S PRESENCE that no alcohol was used in sterilizing skin surface, needle, syringe. Invert blood collection tube slowly at least 5 times to distribute the sodium fluoride anticoagulant.
- Complete blood specimen label by entering name of subject, date, and time of blood collection, and your name in ink.
- In presence of subject, hand tube of blood to law enforcement officer for labeling, signing, packaging and transfer to laboratory. TO OFFICER: Review accompanying information sheet and be sure all information is supplied before sealing and mailing.
- If this is the only sample to be sent to the laboratory, complete the FSD-93, place between polyfoam container and outer box, seal both ends of outer box with enclosed MSP seals and mail first class.

NOTE: Specimen vials no. 1 and no. 2 may be used to transfer other types of samples (blood for typing, urine or bile for drugs, etc.) to the laboratory. DO NOT USE THE TUBE WHICH CONTAINS SODIUM FLUORIDE FOR A BLOOD TYPING SPECIMEN.

TO LAW ENFORCEMENT OFFICER (if urine samples are taken):

- THE URINE SPECIMEN MUST BE COLLECTED IN THE PRESENCE OF AN OFFICER to be certain the subject does not contaminate the specimen and to insure that the subject empties his bladder.
- The urine test requires that subject empty the bladder twice.
 - The urine samples should be collected 1/2 hour apart.
 - Both samples are collected in separate vials. They should be identified as "Specimen Vial No. 1" and "Specimen Vial No. 2".
- The officer must be certain that the label(s) to be placed on the vial(s) have been completed.
- TIGHTEN CAPS FIRMLY. Mark the date, time of collection, name of subject, and your name on the label(s) and attach to vial(s). Place vial(s) in shipping container.
- Complete FSD-93, place between polyfoam container and outer box, seal both ends of outer box with enclosed MSP seals and mail first class.

NOTE: Specimen vials no. 1 and no. 2 may be used to transfer other types of samples (blood for typing, urine or bile for drugs, etc.) to the laboratory. DO NOT USE THE TUBE WHICH CONTAINS THE SODIUM FLUORIDE FOR A BLOOD TYPING SPECIMEN.

FIRST COPY : SUBMIT WITH KIT
SECOND COPY : SUBMIT WITH KIT
THIRD COPY : RETAIN BY SUBMITTING AGENCY

AUTHORITY: Act 300, P.A. of 1949
COMPLETION: Voluntary

POLICE DEPARTMENT
ORIGINAL REPORT

000087

BEST AVAILABLE

COMPLAINT:
INCIDENT: FATAL ACCIDENT

DATE: 92
FILE CLASS:

REQUEST FOR PHOTOGRAPHER:

At approximately 5:50 p.m. this date, 92, a call was received by this from Central Dispatch in regards to a request for a photographer at a PI accident at the intersection of and Streets,

ARRIVAL AT SCENE:

Investigating Officer responded to the location of and Streets, and made contact with Officers on the scene in regards to the incident. Contact was made with accident reconstructionist and investigator of the Police Department. His request was for photography of the scene to be conducted by myself.

PHOTOS EXPOSED:

The photographs taken were with 35 mm negative film, detailing points pointed out by in regards to the photographs he wished to be taken of the scene. General photography of the area was begun, documenting the location of the accident, as well as positions of injured parties who were ejected from vehicle #2, the condition of vehicle #2, its damages inside, outside and underneath. Photographs detailing certain markings pointed out by of vehicle #2 were taken also.

Investigating Officer also exposed photographs of vehicle #1 detailing its damages from all sides, as pointed out by and the general location of its final resting place in relationship to the point of impact and the resulting activity after the impact. Vehicle #1 was photographed from all possible sides, documenting the damage.

USE OF FIRE DEPARTMENT AERIAL FIRE TRUCK:

The aerial fire truck of the Fire Department was brought to the accident scene, where fireman elevated the aerial apparatus so that could take elevated photographs of the scene. During the photography, skid marks were photographed, as well as the layout of the intersection and visible skid marks at the point of impact.

FINAL DISPOSITION OF EXPOSED FILM:

There were four rolls of film exposed. All of the film was placed into cold storage, waiting development on 92. A request for to take the film to the for development has been made.

CONFIRMATION OF M.E.:

Upon arriving back at the Police Department, investigating officer made contact with the Hospital, inquiring as to the notification of the Medical Examiner. It was learned that had responded to the hospital and pronounced the fatally injured individuals dead and will have a report in regards to the medical examiner's investigation.

FOLLOW UP NEEDED:

Some time after the accident scene had been cleared, information became available that there was an injured party who had gone to the Hospital by ambulance. The information on this individual was obtained from the Hospital and the subject was found to be a resident by the name of residing in at the address of

Subject needs to be contacted for her DOB and a possible statement of what she saw in regards to this incident. Also needed are the photographs to be developed by the as mentioned previously and will be requested to take care of this portion of the follow up.

SUPPLEMENTAL INVESTIGATION STATUS:

At this time, the supplemental investigation conducted by is complete, with the photography listed being taken care of as stated.

EVIDENCE TECHNICIAN WORK BY:

DICTATED BY:

TYPED BY:

92, 6:07 a.m.

92, 9:50 a.m.

ORIGINAL INCIDENT
REPORT Page 3

ORIGINAL DATE 1992	INCIDENT NO.
TIME RECEIVED 10:00 A	FILE CLASS BEST AVAILABLE

SPEED DETERMINATION:

I have reviewed the Police Report dated 92. 17:36 HOURS. THE scene photographs. the scale drawing. both vehicles involved. and the scene.

It is my opinion that the 1977 Buick was traveling 64 MPH when it impacted with the left rear section of the 1985 Plymouth van. Further. it is my opinion that the Buick was traveling 74 MPH at the beginning of the 77 feet of skid marks prior to impacting the van.

It is also my opinion that the 1985 Plymouth van was traveling 34 MPH when impacted by the Buick.

STATUS:

Closed. TOT

Post.

680000

PAGE 3	INVESTIGATED BY	REPORTED BY	REVIEWED BY
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U.S. Department of Transportation
National Highway Traffic Safety
Administration

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

CRASHPC PROGRAM SUMMARY

Identifying Title

Primary
Sampling Unit

Case No. — Stratum

Accident Event
Sequence No.

Date (month, day, year) of Run

CRASHPC Vehicle Identification

Vehicle 1

1985

PLYMOUTH

VOYAGER

1

Vehicle 2

1977

BUICK

CENTURY

2

Year

Make

Model

NASS
Veh. No.

GENERAL INFORMATION

VEHICLE 1

Size
Weight 2904 + 623 + = 3527
Curb Occupant(s) Cargo
CDC 5 0 9 L B E W 3
PDOF 80
Stiffness 113 WB 4

VEHICLE 2

Size
Weight 3608 + 723 + = 4331
Curb Occupant(s) Cargo
CDC 1 2 F Y E W 3
PDOF 41
Stiffness 113 shnt WB 4

SCENE INFORMATION

Rest and Impact Positions, Rest and Impact Damage Information [] Yes

VEHICLE 1

Rest Position
X 176
Y 66
PSI 95
Impact Position
X 134
Y 66
PSI 623
Slip Angle

VEHICLE 2

Rest Position
X 174 66
Y 184 70
PSI 21 50
Impact Position
X 328 45 50
Y 5
PSI
Slip Angle

VEHICLE MOTION

Sustained Contact [] No [] Yes

VEHICLE 1

Skidding [] No [] Yes
Skidding Stop Before Rest [] No [] Yes
End-of-Skidding Position
X
Y
PSI
Curved Path [] No [] Yes
Point on Path
X Y
Rotation Direction [] None [] CW [] CCW
Rotation > 360° [] No [] Yes

VEHICLE 2

Skidding [] No [] Yes
Skidding Stop Before Rest [] No [] Yes
End-of-Skidding Position
X
Y
PSI
Curved Path [] No [] Yes
Point on Path
X Y
Rotation Direction [] None [] CW [] CCW
Rotation > 360° [] No [] Yes

NO MESSAGES

IMPACT SPEED mph		SPEED CHANGE mph			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		10.8	-1.9	10.6	DAMAGE DATA ONLY

IMPACT SPEED mph		SPEED CHANGE mph			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		8.8	-8.7	-1.5	DAMAGE DATA ONLY

Plymouth Voyager v. Buick Century

1995 Page 2

SUMMARY OF DAMAGE DATA

(NOTE: '**' indicates default value)

	Vehicle #1		Vehicle #2	
CLASS / STIFFNESS CATEGORIES	4 / 4		4 / 4	
WEIGHT	3527.0 lb		4331.0 lb	
CDC	09LBEW3		12FYEW3	
DAMAGE WIDTH	49.0 in	**	50.8 in	**
CRUSH DEPTH 1	14.5 in	**	30.9 in	**
CRUSH DEPTH 2	7.3 in	**	15.4 in	**
CRUSH DEPTH 3	7.3 in	**	15.4 in	**
CRUSH DEPTH 4	0.0 in	**	0.0 in	**
DAMAGE MIDPOINT OFFSET	-90.1 in	**	-12.8 in	**
DAMAGE ENERGY	12081.8 ft-lb		53668.5 ft-lb	
MAGNITUDE OF PRINCIPAL FORCE	25348.2 lb		45292.1 lb	
DIRECTION OF PRINCIPAL FORCE	-80.0 deg		10.0 deg	
MOMENT ARM OF PRINCIPAL FORCE	-100.9 in		-34.6 in	
DAMAGE CENTROID	-96.4 in		-19.4 in	

DIMENSIONAL, INERTIAL AND CRUSH STIFFNESS PROPERTIES

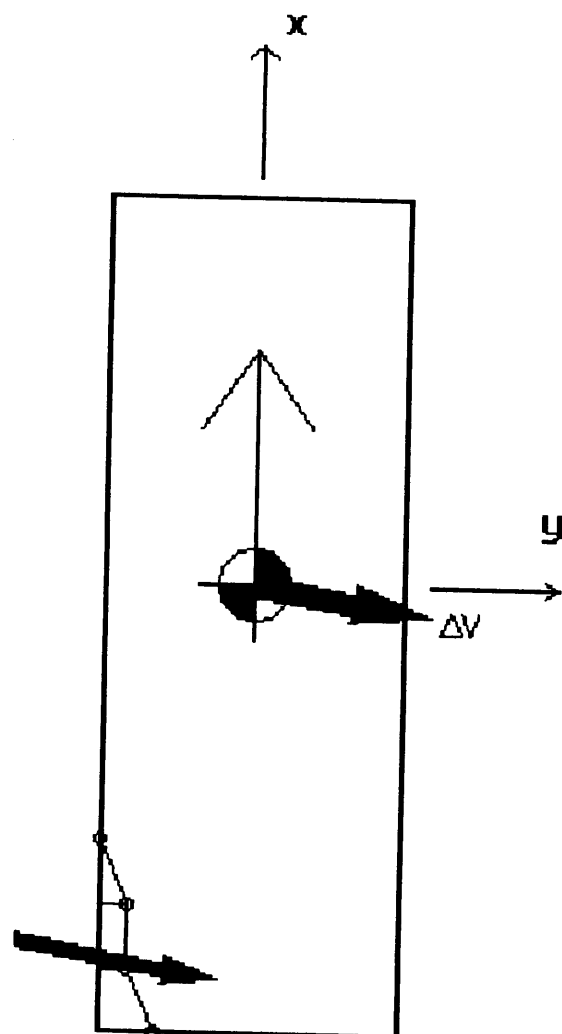
(NOTE: '**' indicates default value)

	Vehicle #1		Vehicle #2	
CG TO FRONT AXLE	54.7 in	**	54.7 in	**
CG TO REAR AXLE	59.2 in	**	59.2 in	**
TRACKWIDTH	61.8 in	**	61.8 in	**
YAW MOMENT OF INERTIA	34147.3 lb-sec^2-in	**	41931.3 lb-sec^2-in	**
MASS	9.1 lb-sec^2/in		11.2 lb-sec^2/in	
BODY LENGTH FROM CG TO FRONT	98.8 in	**	98.8 in	**
BODY LENGTH FROM CG TO REAR	-114.0 in	**	-114.0 in	**
BODY OVERALL WIDTH	77.0 in	**	77.0 in	**

CRUSH STIFFNESSES:

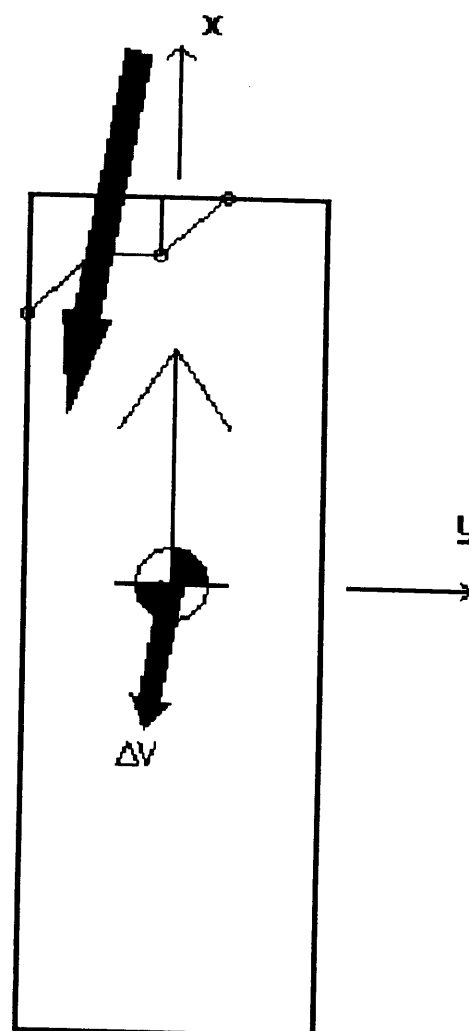
A	B	A	B
lb/in	lb/in^2	lb/in	lb/in^2
143.0 **	50.4 **	355.9 **	33.8 **

Vehicle No. 1



CDC/PDOF: 09LBEW3 -80.0 deg
Max Impact Force: 25348 lb

Vehicle No. 2

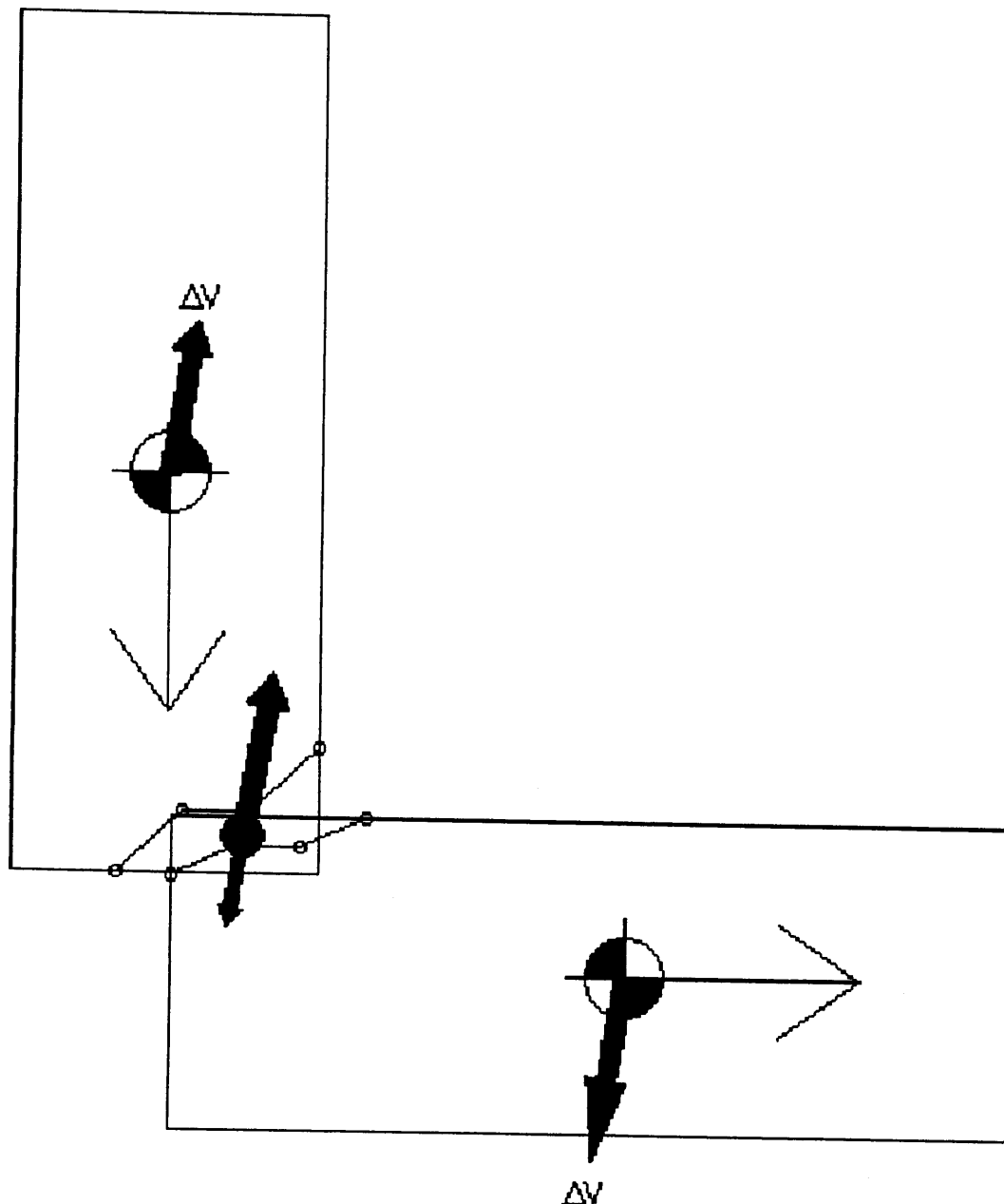


CDC/PDOF: 12FYEW3 10.0 deg
Max Impact Force: 45292 lb



EDCRASH Damage Profiles

	Veh #1	Veh #2
Delta-U (mph):		
X	-1.9	-8.7
Y	10.6	-1.5
Tot	10.8	8.8
Crush Data (in):		
W	49.0	50.8
D	-90.1	-12.8
C1	14.5	30.9
C2	7.3	15.4
C3	7.3	15.4
C4	0.0	0.0



EDCRASH
At Impact

	Ueh #1	Ueh #2
Delta-U (mph)		
(BASIS: Damage)		
X	-1.9	-8.7
Y	10.6	-1.5
Tot	10.8	8.8
PDOF	-80.0	10.0

UNITS: mph,ft,deg

(NO SCENE DATA)

